Keeping the roads running all year round
Annual report and accounts 2023

HC 1545

National Highways

Annual report and accounts 2023

(For the financial year ended 31 March 2023)

Presented to the House of Commons, pursuant to Section 7 of the Government Resources and Accounts Act 2000

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HC 1545

Here at National Highways, we believe that connecting people builds communities, creates opportunities and helps the nation thrive. Our network is a vital part of everyday life, and crucial to the UK economy.

Navigating this interactive document

This contents page is interactive so simply click on the section you would like to go to. The same applies to the smaller contents pages at the beginning of each section. The tools described below can be used to move through our report and return to this page.

Read more

These navigation points are interactive and will take you to the appropriate section for further reading.

In this report

Governance report

Financial statements

Non-financial information statement

Although we are not required to, we comply with the non-financial reporting requirements in Sections 414CA and 414CB of the Companies Act 2006. The table below is intended to guide stakeholders to where the relevant non-financial information is included within our strategic and governance reports.

Reporting requirement	Policies and standards	Outcomes and additional information	Page reference
Environmental matters	Climate action Air quality Biodiversity Noise mitigation Flooding and water quality Cultural heritage	Net zero plan Greening Government Commitments	94 103 109 144 112 145
People and human rights	*Home safe and well*	Embedding our strategy	63
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Further reading

This report references a number of documents, strategies and plans produced by National Highways, including the following key documents:

	Topics			
Publication	**Safety**	**Sustainability**	**Technology**	**Governance**
Smart motorways stocktake second year progress report 2022	•		•	•
Net zero highways: our 2030/2040/2050 plan		•	•	•
Preparing for climate change on the SRN		•	•	•
Digital Roads plan	•	•	•	
Customer service plan 2022–23	•	•	•	
Environmental sustainability strategy		•	•	•
Our social value plan: 2022–2024	•	•		
Delivery plan 2020–2025				•
Modern slavery statement				•

Our impact nationwide

We operate, maintain and improve one of the most advanced road networks in the world, driving economic growth across the country, creating jobs, supporting businesses and opening up areas for development. We aim to provide all our customers with safe and reliable journeys, and to deliver a sustainable benefit to the environment.

Highlights from the second road period (2020–25)

Key facts and figures

For the second road period

£24bn[1]
to be invested

£10.8bn
for operations, maintenance and renewals

£10.5bn
for major projects

£958m
for designated funds[2]

Spending reviews 2021–23 – notice of adjusted financials

1 At the start of the second road period, this figure was £27.4 billion. Changes in the delivery schedules of some of our enhancement schemes have pushed £3.4 billion of funding into the third road period. All related financial projections and targets for 2025 have been adjusted down accordingly.

2 We use standalone, or designated, funds to deliver activities beyond the traditional focus of road investment, investing in our surrounding communities and built, natural and historic environments.

6,648
employees as at 31 March 2023

Our delivery

Progress so far in the second road period

£5.5bn

invested in enhancement schemes

In-year 2022–23: £1.7bn
Target: Second road period target: £10.5bn

32

road schemes opened or started construction

In-year 2022–23: 13
Target: Second road period target: 38 opened: 32 started[3]

£81.4m

invested in 367 safety schemes

In-year 2022–23: £28.4m in 127 schemes
No target

£848m

of efficiency savings achieved

In-year 2022–23: £346m
Target: Second road period target: £2.1bn

3 Post change-control – at the start of the second road period it was 52 opened, 12 started.

Our social impact

Progress so far in the second road period

2,122

biodiversity units[4] (BUs) delivered

In-year 2022–23: 1,618
Target: Second road period target: no net loss (estimated 4,166 BUs)

85

projects completed for walkers, cyclists and horse riders

In-year 2022–23: 2
No target

4,163

quieter households

In-year 2022–23: 985
Target: Second road period target: 7,500

198

innovation and modernisation schemes supported

In-year 2022–23: 52
No target

4 For a definition of biodiversity units, please see our glossary on page 368.

Highlights from 2022–23

Financial highlights

2022–23

£157bn

value of assets managed

2021–22: £144bn

£4.4bn

of total expenditure

2021–22: £4.4bn

£12m

of daily expenditure

2021–22: £12m

£346m

of efficiencies generated

2021–22: £259m

Read more on page 21

Our spending

Where we spent our money in 2022–23

National

£1.53bn

2021–22: £1.36bn (including PFI service payments, national projects and support costs)

North West

£471m

2021–22: £447m

South West

£401m

2021–22: £332m

North East

£492m

2021–22: £436m

Midlands

£513m

2021–22: £514m

East

£452m

2021–22: £468m

South East

£601m

2021–22: £816m

A foreword from our Chairman

Some reflections as I say farewell

Dipesh J Shah OBE
Chairman

"I have been honoured to serve as Chairman of this company, which plays such a pivotal role in connecting communities across England."

I have previously announced that, as this is the final year of my fixed term in office, I will be leaving National Highways towards the end of the year. I have been privileged and honoured to serve as Chairman of this company, which plays such a pivotal role in connecting communities across England. We have achieved much during my tenure and I am grateful to everyone involved with National Highways for their support.

The past year has been challenging for many people and organisations, with rising inflation impacting how we live and do business. National Highways has performed well throughout this difficult time, although we have had to adjust our delivery plans for the second and third road periods, particularly in relation to major projects in order to support wider government efforts to manage public finances. We have prioritised what is most important to us: keeping our roads running safely for our customers.

During my time here, I have been pleased to steer the Board and our Executive on smart motorways, entering a period of reflection as more safety data became available and in light of government's cancellation of new smart motorways. This has been part of wider considerations of what we can do to further improve safety on all our roads. I am also glad to have refocused attention on the important subjects of climate change and new technologies, resulting in our comprehensive carbon net zero and Digital Roads strategies.

We have embarked on a journey of cultural change within our organisation to become more agile and customer-focused; our future direction lies in enhanced service to our four million or so customers, who use our roads daily. We are better at listening, and our employees are more engaged.

I have made many site visits across our regions over the past three years, and I have always been struck by the talent and commitment we have within our company. We must continue to nurture this. My abiding memory is one of an army of unsung heroes in every part of the organisation who go above and beyond their call of duty, and my thanks go to everyone who works at National Highways, for their tireless commitment.

During the year, there have been several changes to the Board. We have welcomed Diego Oliva and Simon Blanchflower as new members, both of whom bring considerable and varied boardroom experience. Two Board members have stepped down: Carolyn Battersby, who as the Department for Transport-appointed Director provided an excellent interface with our Shareholder; and Roger Lowe, who as the Senior Independent Director contributed greatly to the Board over many years. My thanks and best wishes to both of them.

Finally, I would like to thank Nick Harris and our Executive team, along with the Board, National Highways employees, supply chain partners and our colleagues in government, for what has been a professionally rewarding and enriching appointment. National Highways will now work closely with the Department for Transport (DfT) to appoint my successor and ensure a smooth handover. I wish them and everyone at the company continued success into the next five-year road period.

[Signature]

Dipesh J Shah OBE
Chairman

A message from our Chief Executive

Meeting the challenge of inflation

Nick Harris
Chief Executive

"The global political landscape has resulted in some of the most significant economic challenges we have faced in over a decade, with inflation impacting households and businesses alike."

As a country, we have had a challenging year. The global political landscape has resulted in some of the most significant economic challenges we have faced in over a decade, with the consequences of inflation impacting households and businesses alike. Given these considerable disruptions to British industry, I am pleased that we remain broadly on track to meet our scheduled delivery commitments.

We are not immune, however, to the rising cost of living. To help address the challenge of absorbing inflation across our transport portfolio, and in line with the Written Ministerial Statement of 9 March 2023, we are deferring two of our enhancement schemes, the A27 Arundel and A5036 Princess Way in Liverpool, to a later road period. We have further decided that our pipeline schemes for delivery by 2030 will continue to be developed, but will also be considered for delivery during the fourth road period (beyond 2030).

Separately, we are rephasing the construction of our important Lower Thames Crossing project by two years. Scheme deferrals are disappointing, I know, but ultimately allow us to protect what really matters. For us, this means focusing our existing resources into running the strategic road network (SRN) safely and reliably for our customers every day of the year.

We are progressing at pace the stocktake actions agreed with DfT to further improve the safety of our smart motorways. At just over the halfway point of our five-year plan, we have delivered the vast majority of these actions and, importantly, all of those which were due to have been completed by this time. Our third year progress report is due to be published later this summer, but in the meantime, you can read our *Smart motorways stocktake second year report 2022*, published last May.

In April 2023, government announced the cancellation of 14 smart motorways schemes, 11 which were already paused and 3 earmarked for construction during our third road period, due to financial pressures and in recognition of the current lack of public confidence. We are, however, continuing to deliver our £900 million investment in further improving the safety of existing smart motorways, including providing over 150 more emergency areas and improving technology.

We also continue to collect and monitor safety, economic, environment and capacity data. Significantly, we appreciate that more work is needed to help ensure everyone feels confident when using existing smart motorways. We are listening to, and acting on, what the public and our stakeholders tell us, and we will work with government to track public confidence in smart motorways.

We closely monitor our wider safety performance too, and we have some of the safest roads in the world. You can read about our safety performance on pages 63 to 88 of this report.

This year, we invested £1.7 billion of our capital budget into enhancement schemes, opening nine schemes to traffic, starting construction on four and adding around 172 lane miles of capacity to our network. We also invested £1.2 billion in operational expenditure, meeting or exceeding all our key performance indicators (KPIs) in these areas, with the exception of average delay. You can read more about this on page 25.

Beyond traditional road infrastructure, we are thinking ever more about our legacy and how we can protect the planet, contribute to local communities and act as a force for good. This year, we published *Our social value plan: 2022–2024* (October 2022) and our *Environmental sustainability strategy* (May 2023, post year-end). Together with *Net zero highways: our 2030/2040/2050 plan*, these detail how we will embed sustainable approaches into our ways of working. They also show how we will use the latest technologies to our best advantage and transform our workforce to be ever more adaptable, agile and productive.

I am particularly proud of the work we are doing on the Historical Railways Estate, a collection of over 3,100 former railway structures throughout England, Wales and Scotland that we manage on behalf of DfT. We are repurposing many of these derelict assets into active travel routes for non-road users (walkers, cyclists and even green bridges for animals!), supporting greener travel and preserving the cultural heritage of these unique architectural sites. This year, we ringfenced £9 million to spend on 265 schemes, 179 of which were in England, 62 in Scotland, and 24 in Wales. Two major schemes were Teviot viaduct's footbridge and Castlefield viaduct's urban regeneration as a 'green sky park'. You can read more about these case studies on page 146.

"We are reaching the third stage of our transformation journey from road builder (as Highways Agency) to road operator (as Highways England) to service provider (as National Highways). I am focused now on seeing a successful end to the second road period and planning for the third road period with vigour."

We could not do what we do without our incredible teams of people, and I'd like to take the opportunity to thank everyone for another year of hard work. In this year's annual employee engagement survey, we had feedback from 83% of our organisation (up 5% on 2022), with a 67% engagement score (up 2% on 2022). Nearly 75% of our people said they were proud to work for our company, and 72% said that we cared about their wellbeing. I'm really pleased with these results, while also being committed to improving the areas we are doing less well in to ensure that we provide a safe, supportive and enabling place to work. In a year of public sector strikes, I am also pleased that our strong relationships with our unions, and positive outcome to pay negotiations, meant that industrial action was minimal, and with very low impact on our business.

I have a few hellos and goodbyes to make to my colleagues on the Executive team and Board. Peter Mumford (Executive Director, Major Projects and Capital Portfolio Management) and Victoria Higgin (Chief Digital and Information Officer) left our Executive team this year to be replaced by Nicola Bell and Richard Pedley respectively. On the Board, Roger Lowe and Carolyn Battersby stepped down from their roles, and Diego Oliva and Simon Blanchflower joined us as new Non-Executive Directors. I would like to thank Peter, Victoria, Roger and Carolyn for their service to our organisation, and to wish them well in their new endeavours. I would also like to welcome Nicola, Richard, Diego and Simon to their new roles, and I look forward to working with them all.

Finally, I would like to thank our DfT colleagues, key stakeholders, including Transport Focus, and supply chain members for another year of strong collaboration and mutually supportive partnership. These evolving and robust relationships are crucial if we are to work better and do better for people and planet. I have welcomed challenge from our regulator, the Office of Rail and Road (ORR), and look forward to carrying on our work with them to further improve how we deliver.

We are reaching the third stage of our transformation journey from road builder (as Highways Agency) to road operator (as Highways England) to service provider (as National Highways). I am focused now on seeing a successful end to the second road period, including working closely with DfT to help achieve government's objectives, and planning for the third road period with vigour.

[Signature]

Nick Harris
Chief Executive

Financial review

Balancing the books

Vanessa Howlison
Chief Financial Officer

"Our level of investment has not increased as we had planned, in part due to government's decision to pause in 2022, and then cancel in 2023, new smart motorway schemes."

This year was the third year in our five-year road period. Through careful management of our finances, we ended the year successfully to within 0.5% of our revised total funding for the year.

We spent £4.4 billion operating, maintaining and enhancing our road network. We invested £1.2 billion in operating our network and £3.2 billion carrying out renewals and enhancements, as committed in our *Delivery plan*.

Our level of investment has not increased as we had planned, in part due to government's decision to pause in 2022, and then cancel in 2023, new smart motorway schemes. Our investment has also been affected by challenges in obtaining planning consents, known as Development Consent Orders (DCO), for several of our enhancement schemes.

The impact of inflation

Inflationary increases have been a factor this year in all walks of life, and National Highways has been no exception.

The biggest impact to our bottom line has been on our operational expenditure, most notably on our index linked Design, Build, Finance and Operate (DBFO) contracts, also known as PFIs. In October, as part of HM Treasury's supplementary estimate process, we negotiated an additional £32 million of funding from DfT to largely cover this unforeseen inflationary pressure.

Our capital portfolio has also been hit with inflationary increases on construction costs throughout the year. The impact this year, however, has been mitigated by lower costs on some of our enhancement schemes due to delays in obtaining planning consent.

Where our funding comes from

Our funding comes directly from government and is split between capital investment and operational expenditure. We have five-year investment agreements and each year we draw down funding to deliver against our annual business plans.

We measure our financial performance as a company by our ability to manage in line with these allocations, by achieving our efficiency targets and by achieving the delivery and operational outcomes set out in our delivery plans.

How we manage our money

To deliver our commitments within our funding requires careful financial management. We support government's fair payment charter, paying our suppliers on time with 97.56% of our payments reaching our suppliers' bank accounts within five days of us receiving their invoice.

We use Project Bank Accounts to ensure that all tiers of our supply chain receive payment at the same time. This improves cashflow to many Small and Medium-sized Enterprises (SMEs). We plan and manage our cashflow carefully to remain within government's 5% forecast accuracy target. This helps HM Treasury manage wider public sector finances.

Financial highlights

Our total expenditure was
£4.4bn

We invested
£3.2bn
in our network

This included
£1.7bn
on enhancement schemes

We invested a further
£148m
into projects through our designated funds[1]

Our operational expenditure was
£1.2bn

We spent
£436m
on maintaining and operating our network

This means we spent
£12m
per day

We paid
97.6%
of our suppliers within 5 days

Our cashflow accuracy was within
5%

1 We use standalone, or designated, funds to deliver activities beyond the traditional focus of road investment, investing in our surrounding communities and built, natural and historic environments.

Our financial performance

Capital investment

	Funding £m	Outturn £m	Variance £m
Total capital investment[1]	3,213	3,212	1

1 Capital departmental expenditure limit

Capital investment refers to funds used to acquire, upgrade or increase the benefit of our assets in the future. We have ended the financial year successfully, landing just £1 million short of our budget of £3,213 million. More than half of our capital investment (£1.7 billion) was on enhancement schemes, improving journey times and relieving congestion. We invested £0.9 billion, over a quarter of our capital investment, on renewing our network to help ensure that our structures and road surfaces remain well maintained and operating safely. We invested £407 million in business costs, which include on-road technology, operational buildings and staff costs. Through our designated funds portfolio, we invested a further £148 million on projects to deliver a range of benefits for our customers, neighbouring communities, the environment and the economy.

Our capital journey this year started with £438 million less delivery than had been provided for in the *Spending review 2021.* This funding mismatch arose in part due to government's decision to pause in 2022, and then cancel in 2023, new smart motorway schemes. Our investment has also been affected by challenges in obtaining planning consents, known as DCOs, for several of our enhancement schemes. Having reviewed the portfolio in the first quarter, we were able to commit a further £81 million into our enhancement programme, reflecting acceleration of activity to de-risk project delivery and account for emerging cost increases due to inflation. This brought our plan in line with the funding, minus £357 million (10%) that we plan to be able to use in future years as part of our capital flex mechanism.

Managing the financial outturn of a large, complex capital portfolio is not easy; we have to constantly balance delivery risks with opportunities to accelerate work where possible. Despite adjusting our funding level for the DCO challenges, we also saw risks crystallising that led to delays to our designated funds and renewals programmes. We were able to offset this with an opportunity to bring forward capital investment on the Lower Thames Crossing for leases to secure land at Port of Tilbury and Southern Valley golf course, required for the construction programme. This was the first year in the second road period that we have outturned in line with our annual funding.

Operational expenditure

	Funding £m	Outturn £m	Variance £m
Operational expenditure[1]	1,235	1,244	(9)

1 Resource departmental expenditure limit, excluding depreciation

In a year when we have experienced significant inflation costs across our business, our overall operational costs were within 1% (£9 million) of our revised funding envelope that we agreed with DfT in November.

Unlike our capital funding, any annual underspends for operational expenditure cannot be recovered later in the road period. As a result, we entered the year with £19 million (1.6%) over-programming. We balanced this pressure with savings generated from a prioritisation exercise which included a large contribution from Digital Services and more realistic workforce plan assumptions.

[Charts]

As part of HM Treasury's supplementary estimate process in October, we received an additional £32 million of budget cover from DfT for 2022–23 to cover: inflationary pressure on maintenance and index-linked DBFO contracts (£20 million); previously unfunded Operation Brock costs (£10 million); and new scope for mobilising the RAPID charging fund project (£2 million).

Our total operational expenditure was £1.2 billion. We spent £438 million (35%) on operating and maintaining our network and £453 million (36%) on PFI contract payments. These relate to providers who financed and built roads for us in the past and now maintain them.

We spent a further £287 million keeping our business running and improving the way that we operate. This ranged from ensuring we had effective Digital and IT infrastructure and implementing the highest safety and engineering standards to delivering effective communications campaigns.

We received separate funding of £66 million to manage some specific activities on behalf of DfT. These activities, known as Protocols, are additional services to our day-to-day operational activities, not core to our role as a strategic highways company. They include operating and collecting income on the Dartford River Crossing, Historical Railways Estate and managing strategic salt stores.

Where we have invested

Our maintenance and renewal programmes deliver benefits throughout the country. Our work is targeted where our asset condition data tells us the need is greatest.

Spend on network enhancement is greatest in areas where the largest schemes are located, although the benefits can be felt over a much wider area and across regional boundaries.

In the South East, we invested £196 million into maintenance and renewals activities and £339 million into enhancement schemes. This included investment into our M4 junctions 3 to 12 enhancement scheme (£41 million), which aims to improve one of the most congested routes in the country. We invested a further £168 million into pre-construction activity on the Lower Thames Crossing.

In the Midlands, we invested £219 million into enhancement schemes. This included investing £77 million into our M42 junction 6 scheme to reduce congestion and improve access to key businesses and locations such as Birmingham Airport, supporting economic growth in the area. This scheme will also improve access for cyclists, walkers and other vulnerable users of our network. We invested £275 million into maintenance and renewals activities.

The Yorkshire and the North East region saw the largest enhancement investment (£291 million) this year outside of the South East, supporting government's initiative for growth in the north. Additionally, we invested £186 million into maintenance and renewals activities on many well-known motorways and major A-roads, including the M1, A1(M), M62, M18, A1, A19, A63 and A69, covering a total of 670 miles.

This year, our highest level of maintenance and renewals activity (£283 million) was in the East, predominantly because of the concrete roads replacement programme. Our enhancement activity in the region (£140 million) included pre-construction activity on the A12 Chelmsford to A120 widening scheme, which aims to take long-distance traffic off local roads, reducing congestion and improving safety for road users. We also invested into the nationally-significant A428 Black Cat to Caxton Gibbet scheme.

[This graphic details how we spent our money in 2022-23.]

Delivering value for the taxpayer

Key performance summary

Achieving efficient delivery

Our targets and ambitions

We have a challenging efficiency target of making capital and operational expenditure savings of at least £2.1 billion[1] by the end of the second road period. Our published *Efficiency and inflation monitoring manual* sets out how we will define, demonstrate and evidence efficiency.

Our 2022–23 results and performance

We constantly forecast and monitor where we are against our £2.1 billion target, and we are currently on track to achieve it. We will achieve the remainder of the target incrementally across the next two years of the second road period. This summer, we are due to publish our third *Annual efficiency report*, which will set out what we are doing to achieve our KPIs. We are continuing to monitor the impact that Covid-19 has had on our efficiency delivery, together with taxation changes and other cost headwinds. We will report on this once a clearer picture has emerged.

For the second road period, we have a known amount of efficiency embedded within our portfolio and further measured efficiency to demonstrate. Much of our measured efficiency is from improvements we made in the first road period which still add benefits now as they are delivered over time. We call this ‘carry over’ efficiency, and we have reported £262 million cumulatively to date.

Achieving efficient delivery encompasses all elements of our business. It now includes targets for operational expenditure, demonstrating how important it is across our portfolio. We are always looking for improved ways of working to deliver value for money.

We made total cumulative efficiency savings of

£848m

in 2020–23, with

£346m

saved in 2022–23, which is in line with our projections. This includes an adjustment to account for the impact of higher than funded inflation levels.

1 Revised down from original second road period target of £2.23 billion.

[Chart]

Our financial statements

There are some technical differences between how our expenditure appears in the financial statements and how it appears in relation to our funding and wider government accounts. To make this difference easier to understand, we have set out a reconciliation on page 363. For our full financial statements, including notes to the accounts, please refer to pages 282 to 367.

Value of our network

Our assets

As at 31 March 2023, the assets we hold were valued at £157.4 billion and relate mainly to the SRN.

The asset value, this year, has increased by £13.1 billion. This is largely due to the increases in the indices used to revalue our assets annually. Most notably, the index used to reflect the cost of road building increased by 12.6%. These increases were partly offset by a reduction in the SRN structures valuation following a quinquennial review.

In addition to £156.1 billion of network-related assets, we also hold £0.9 billion of non-network assets, which includes land, dwellings, plant and machinery and leases.

At year-end, we held a further £290.5 million of current assets, most of which are trade and other receivables.

[Chart]

Depreciation

Depreciation is calculated using either condition or age data, dependent on the type of asset. As a result, the company incurred £1.2 billion of depreciation and amortisation charges in-year, reducing the net value of the assets.

Liabilities

As at 31 March 2023, we held £1.2 billion of current, short-term liabilities, mainly accrued expenditure. Invoiced trade payables were relatively low (£81.3 million) because of our prompt payment initiative.

We also have non-current, long-term liabilities of £1.4 billion, of which the majority relates to recognition of the future PFI payments over the life of the contracts. The remainder relates to provisions, mostly for land, and includes potential payments for compulsory purchase orders and blight.

Looking ahead

Inflation creates uncertainty over and pressure on our future costs as we discuss the funding for the next road period. There is a high likelihood of changes to the shape of our capital portfolio, driven by Treasury's announcement in the 2022 Autumn Statement that Departmental spend will be held at *Spending review 2021* levels until 2027–28.

Our focus in the medium term will be clarifying the detail and negotiating the finances for the third road period.

Our operational expenditure plans are the tightest they have been since we became a company over nine years ago. We have managed to secure additional funding to cover some of our inflationary pressures, but significant challenges remain. We will need to work hard to ensure we live within our tight funding envelope and keep dialogue open with our DfT colleagues as the year unfolds.

[Signature]

Vanessa Howlison
Chief Financial Officer

How we've performed this year

We use the metrics set out in our performance framework as the basis for monitoring our progress. Our results from the last year have been assured by our performance compliance team, validated by our internal audit team and approved by the Board.

Delivering against our performance framework commitments

Our performance framework for the second road period brings together all our delivery aims for 2020–25, including those from government's *Road investment strategy* (RIS2), into one place. It provides the basis for monitoring by the ORR, along with our *Delivery plan*.

Our framework covers KPIs, other indicators that we will report on every year to demonstrate performance, descriptive commitments and government's RIS2 enhancement schemes and their key milestones.

It also includes the designated funds definition list, a summary of our key asset renewals and a list of Protocol services that we carry out for government, such as maintaining the national strategic salt stock.

1 Improving safety for all

Our target:

Achieve a

50%

reduction in the number of people killed or seriously injured (KSI) on our network by the end of 2025, against a 2005–2009 baseline.

[Chart]

Read more on page 67

2 Providing fast and reliable journeys

Our targets:

Ambition that average delay per mile driven will be no worse by the end of the second road period compared to the end of the first road period.

[Chart]

Read more on page 52

43m

maximum limit of network lane-metre-days impacted by roadworks per month, the roadworks network impact (RNI) KPI.

[Chart]

Read more on page 52

86%

of motorway incidents cleared within one hour, based on 24-hour coverage.

[Chart]

Read more on page 52

3 A well-maintained and resilient network

Our target:

96.2%

of road surface in a condition that requires no further investigation for maintenance until the end of the second road period (2025).

[Chart]

Read more on page 52

4 Delivering better environmental outcomes

Our targets

Mitigate noise for

7,500

households in noise important areas.

[Chart]

Read more on page 144

No net loss of biodiversity across all National Highways activities by the end of the second road period.

[Chart]

Read more on page 109

Bring agreed sections of the SRN into compliance with legal nitrogen dioxide (NO2) limit values in the shortest possible time.

[Chart]

Read more on page 103

Reduce carbon emissions resulting from National Highways’ electricity consumption, fuel use and other day-to-day operational activities during the second road period.

[Chart]

Read more on page 97

5 Meeting the needs of all users

Our targets

82%[1]

road user satisfaction score for the first two years of the second road period, with year-on-year increase in the following years.

1 Target suspended for RP2 to date, due to the survey moving from in-person to online in response to Covid-19. A new target has been agreed, to commence in 2023–24.

[Chart]

Read more on page 124

By 2025

90%

of overnight road closures information accurately issued seven days in advance of work starting.

[Chart]

Read more on page 55

6 Achieving efficient delivery

Our target

We must make capital and operational expenditure savings of at least

£2.1bn[2]

by the end of the second road period.

2 Revised down from original second road period target of £2.23 billion.

[Chart]

Read more on page 22

National overview

Nicola Bell, Executive Director Major Projects

"As part of our ambitious £24 billion investment programme*, we are investing £10.5 billion into enhancement schemes across the second road period, providing measurable benefits to our customers, stakeholders, local communities and the wider economy.

* Following the *Spending review 2021*

[This map shows the breakdown of schemes opened for traffic and in construction in 2022-23.]

In 2022–23, we:

Invested

£1.7bn

of our capital budget into enhancement schemes

Started construction on

4

schemes

Opened

9

schemes to traffic

Added around

172

lane miles of capacity to our network

Our biggest schemes open for traffic

As part of our enhancement programme for the second road period, we have 69 large, complex and nationally significant schemes, all of which will provide regional and national benefits. Over the following pages, we provide insight into four of these schemes, which opened for traffic in 2022–23.

A1 Scotswood to North Brunton

Read more on page 31

M6 junctions 13 to 15

Read more on page 33

A2 Bean and Ebbsfleet junctions

Read more on page 35

M4 junctions 3 to 12

Read more on page 37

Case study

A1 Scotswood to North Brunton

The route

The A1 Newcastle Gateshead Western Bypass is one of the busiest parts of our network in the Yorkshire and the North East region, with over 110,000 vehicles using this route every day. Peak hour congestion often led to unreliable journey times. With new housing and employment developments planned for the area, traffic is also forecast to increase.

Our scheme

Following two and a half years of construction, we opened this £110 million scheme to traffic on 26 September 2022. Through this scheme, we:

- built an additional lane in each direction on an 8 km section of the A1 between Scotswood and North Brunton
- installed a new concrete safety barrier
- upgraded lighting
- installed new overhead signs to better inform customers and make journeys easier and safer

This benefited the Yorkshire and North East region by:

- delivering a safer and more serviceable network, with reduced heavy traffic, delays and collisions
- enabling better movement of goods and access to transport hubs, including Newcastle Airport
- unlocking economic growth, improving accessibility to jobs and services while also supporting new business and development opportunities along the A1, including Team Valley Employment Zone and Metrocentre

By reusing existing gantries, we saved:

642m^3

of reinforced concrete

1,744 tonnes

of CO_2 equivalent (tCO_2e)

The use of alternative retaining solutions on the project saved a further

5,721 tCO_2e

Supporting local employment:

1,900

people worked on our project

65%

of workers came from the local area

70

apprentices were directly employed on this scheme

Sal Hopkinson, Project Manager

Wider impact

We provided this additional road capacity on the A1 without using any land outside our highway boundary, minimising the impact on the surrounding community and environment.

To improve water quality of the adjacent Ouse Burn watercourse, we converted a redundant pond into a sustainable drainage system. This filters rain that runs off the road and helps the removal of hydrocarbons, sediment and heavy metals. We also planted over 3,500 trees and 15,200 shrubs as part of the project, with additional planting and improvements to community spaces such as Whickham Thorns activity centre.

Case study

M6 junctions 13 to 15

The route

The M6 junctions 13 to 15 is one of the busiest sections of road in the UK, used by over 127,000 vehicles each day. It suffered from heavy congestion and unpredictable journey times, especially during peak hours. Congestion on this stretch of motorway also impacted local roads. Through this scheme, we aimed to remove major bottlenecks and improve journey time reliability, helping drivers as well as local businesses.

Our scheme

We permanently converted the hard shoulder in both directions into a fourth lane for traffic, providing an additional 33 lane miles. This helped reduce journey times and journey time variations by two to five minutes, as well as driving improvements on surrounding roads, with traffic reassigning to this route. Having started work in March 2018, we opened for traffic in August 2022.

To further improve safety, we hardened the central reservation and installed a rigid concrete barrier across the length of the route. We also built emergency areas: 21 were constructed originally and five more were built between October 2021 and June 2022, in addition to 18 other places to stop in an emergency. Stopped vehicle detection is now in place throughout the scheme length, further enhancing road user safety.

Traffic can now be dynamically controlled for congestion and incident management, with variable message signs providing clear information about driving conditions, journey times and relevant operational information.

We appreciate, however, that more work is still needed to help ensure everyone feels confident when using existing smart motorways.

We secured

£4.1million

for a separate project to target 25 locations alongside rivers and streams of a Staffordshire town, creating havens for wildlife, alleviating flooding and giving local residents better access to their rivers and green spaces

We contributed

£230,000

to a number of local highway improvements to leave a positive legacy and benefit local residents

We provided separate funding of

£49,000

to further contribute to the delivery of local improvements

We raised nearly

£12,500

for many charities and good causes

Benyam Kenbata, Project Manager

Wider impact

We worked to reduce the impact of our scheme on the local area, including:

- installing nearly 1.2 miles of new noise barriers in built-up areas
- delivering between 1db and 10db of noise reduction, reaching around 4% of properties within the scheme area

We employed 4,231 people through this scheme, including through our supply chain. Of these people, 43% were locally employed and 17 were graduates or apprentices.

We built relationships with thousands of stakeholders to keep them informed when our work had the potential to disrupt them. We also directly contributed to the local community. In July 2022, for example, a group of people from our project team helped refurbish the playground of a local school.

"I just wanted to pass on my sincere gratitude for the work you've completed at the school for us. I am really pleased, it has made a huge difference for us and saved us a lot of time, effort and money! Please pass on my thanks to the team for all their hard work".

Andrea Cairns, Executive Headteacher, All Saints School, Church Leigh

Case study

A2 Bean and Ebbsfleet junctions

The route

The Bean and Ebbsfleet junctions are on the busy A2 trunk road and are just over a mile apart. The Bean junction connects Bluewater shopping centre and the B25 to the A2, while the Ebbsfleet junction connects the A2 with the B259 Southfleet Road. Through our scheme, we tackled congestion and supported local economic development and housing growth in northwest Kent.

Our scheme

Our £112 million scheme, which opened to traffic in June 2022, has improved the existing junctions at Bean and Ebbsfleet by:

- increasing the size of the A2 slip roads and roundabouts
- adding traffic signal control and a new bridge across the A2 at Bean junction, along with a new slip road

This has created additional capacity on one of our busiest stretches of road, supporting the wider economy, increasing safety and leading to smoother and more reliable journeys.

We spent

£112 million

on improvements

Our scheme supported the development of

15,000

new homes

To date we have delivered

£36 million

of social value

This exceeds our original social value commitment of

£12 million

Stephen Binkuweir, Project Manager

Wider impact

Our scheme supports the Ebbsfleet Garden City. This is the first garden city in a generation and the site of approximately 15,000 new homes and significant commercial development.

Located within the wider Thames Gateway development area, our scheme also improved access to local communities, a high-speed rail station and Bluewater shopping centre.

We worked in partnership with the Ebbsfleet Development Corporation, who invested £45 million, to deliver the scheme alongside other local improvements to landscaping, walking, cycling and horse riding facilities.

We measured the social value impact of our scheme throughout construction. To date, we have delivered total social value of £36 million.

This has greatly exceeded our original scheme commitment to deliver £12 million of social value. As an example, we had a higher level of local employment, in particular of apprentices and graduates, than originally planned, with a significant cooperation with local charities and promotion of opportunities across the construction industry.

As our works started near the beginning of the Covid-19 pandemic, our project required adaptability and flexibility to ensure that milestone dates were achieved. We worked closely with the Kent Corridor Coordination Group, Bluewater Shopping Centre, Kent County Council, and the Inland Border Facility (set up at Ebbsfleet) to ensure that disruption during the works was minimised.

Case study

M4 junctions 3 to 12

The route

The M4 is a key strategic route linking London to the M4 corridor, the West of England and Wales. The route has historically experienced very high traffic flows, around 130,000 vehicles a day. This has led to severe congestion, especially around peak times between junction 3 (Hayes) and junction 12 (Theale, west of Reading). This route is the key gateway to Heathrow Airport and the M25 London orbital in the west of London.

Our scheme

Our M4 junctions 3 to 12 scheme delivered additional lanes to increase capacity and introduced variable speed limits to smooth the flow of traffic, contributing to improved journey times and more reliable journeys.

Journey time savings since opening the scheme have contributed over £1.4 billion to the economy:

- An economic efficiency for business users of £870 million Net Present Value (NPV)
- An economic efficiency for non-business users of £272 million NPV
- Reliability benefits for business users of £154 million NPV
- Reliability benefits for non-business users of £107 million NPV

We expect that our scheme will reduce the number of people killed or seriously injured by approximately 8%, and contribute to a reduction of 33 fatal, 303 serious and 1,622 slight incidents.

We appreciate, however, that more work is still needed to help ensure everyone feels confident when using existing smart motorways.

Construction started in July 2018, and we opened this scheme to traffic in December 2022.

As part of our delivery, we upgraded infrastructure across 32 miles of road, investing £929 million. We successfully constructed and commissioned:

159
gantries

45
roadside telephones

94 miles
of drainage

880
traffic signs and signals

34
emergency areas and associated signs

43.9 miles
of boundary fencing

Steve Foxley, Project Manager

96
CCTV cameras, with the ability to see 100% of the carriageway

over
80 miles
of safety barriers

156
stopped vehicle detection radar heads

32.7 miles
of concrete road barriers

Wider impact

To meet our environmental objectives for the schemes, we:

- laid 326,465t of low-noise surfacing
- completed 1.4 sqm. of landscaping
- achieved 39.3t of CO_2 emission savings from renewable investments
- installed 14.7 miles of environmental barriers
- diverted 310,000t of soil from landfills

We also recognised the importance of supporting local economic growth through our scheme. We added **£186.4 million** of social value to the local economy, including through:

- 831 locally employed full-time equivalents (FTEs) and 87 local SMEs
  - working over 108,052 days
  - adding £14.5 million through local employment
- £166 million of committed spend to large local organisations
- over £161,000 fundraised for local charities
- 62 graduates and 28 apprentices employed through our supply chain

Regional updates

Our ambitious enhancement programme for the second road period will improve safety and deliver economic, social and environmental benefits across all parts of the country. In 2022–23, we started construction on four schemes and opened a further nine schemes to traffic.

Yorkshire and the North East

[This shows a regional map to illustrate the location of each scheme.]

1 A1 Scotswood to North Brunton
2 M621 junctions 1 to 7
3 A1 Birtley to Coal House
4 A63 Castle Street
5 A1 Morpeth to Ellingham
6 A1 Doncaster to Darrington
7 A19 North of Newcastle junctions
8 A64 Hopgrove
9 M1/M62 Lofthouse interchange
10 M1 junctions 35a to 39 Sheffield to Wakefield
11 M1 Leeds Eastern Gateway

Scheme cancelled following government's April 2023 smart motorways announcement:
M62 junctions 25 to 30

North West

[This shows a regional map to illustrate the location of each scheme.]

1 A585 Windy Harbour to Skippool
2 M6 junctions 21a to 26[1]
3 M56 junctions 6 to 8[1]
4 A66 Northern Trans-Pennine
5 A5036 Princess Way[2]
6 Mottram Moor link road and A57 link road
7 M60/M62/M66 Simister Island interchange
8 M6 junctions 19 to 21a Knutsford to Croft
9 M6 junction 22
10 Manchester South East junction improvements
11 Manchester North West Quadrant

1 These schemes were already over three quarters constructed in April 2023 when government announced the cancellation of new smart motorways

2 Scheme deferred to the third road period as part of March 2023 ministerial announcement

Scheme cancelled following government's April 2023 smart motorways announcement:
M62 junctions 20 to 25

Midlands

[This shows a regional map to illustrate the location of each scheme.]

1 M6 junctions 13 to 15
2 M1 junctions 13 to 19
3 M42 junction 6
4 A46 Coventry junctions
5 A52 Nottingham junctions
6 M6 junction 10
7 A38 Derby junctions
8 M54 to M6 link road
9 A46 Newark bypass
10 A5 Dordon to Atherstone
11 A5 Hinckley to Tamworth
12 M1 Leicester western access
13 M6 junction 15 Potteries southern access
14 A483 Pant-Llanymynech Bypass
15 M1 North Leicestershire

Schemes cancelled following government's April 2023 smart motorways announcement:
M40/M42 interchange
M42 junctions 3a to 7
M6 junctions 4 to 5
M6 junctions 5 to 8
M6 junctions 8 to 10a

South West

[This shows a regional map to illustrate the location of each scheme.]

1 A417 Air Balloon[1]
2 A303 Sparkford to Ilchester
3 A30 Chiverton to Carland Cross
4 A303 Amesbury to Berwick Down
5 A358 Taunton to Southfields
6 A38 Trerulefoot to Carkeel safety package
7 M27 Southampton access
8 Severn resilience package

1 Scheme progressed ahead of its original 2023–24 commitment

Schemes cancelled following government's April 2023 smart motorways announcement:
M4/M5 interchange (M4 junctions 19 to 20 and M5 junctions 15 to 17)

London and the South East

[This shows a regional map to illustrate the location of each scheme.]

1 M4 junctions 3 to 12
2 M27 junction 4 to 11
3 M25 junction 25
4 A31 Ringwood
5 A2 Bean and Ebbsfleet
6 A27 East of Lewes package
7 M25 junction 28[1]
8 M25 junction 10[2]
9 M2 junction 5
10 A21 safety package
11 M3 junction 9
12 M27 Southampton junction 8
13 A27 Arundel bypass[3]
14 Lower Thames Crossing
15 A27 Worthing and Lancing improvements
16 A2 Brenley Corner
17 A2 Dover Access
18 A27 Chichester improvements
19 A27 Lewes to Polegate
20 A3/A247 Ripley South
21 A404/M40 junction 4 High Wycombe
22 A404 Bisham junction

1 Scheme progressed ahead of its original 2023–24 commitment
2 Scheme started construction during 2022–23
3 Scheme deferred to the third road period as part of March 2023 Ministerial Announcement

Schemes cancelled following government's April 2023 smart motorways announcement:
M3 junctions 9 to 14
M25 junctions 10 to 16

East

[This shows a regional map to illustrate the location of each scheme.]

1 A47 Great Yarmouth Harfreys junction[1]
2 A47 Wansford to Sutton
3 A47 North Tuddenham to Easton
4 A47 Thickthorn junction
5 A47 Blofield to North Burlingham
6 A428 Black Cat to Caxton Gibbet
7 A12 Chelmsford to A120
8 A11 Fiveways junction
9 A12/A14 Copdock interchange
10 A120 Braintree to A12
11 A47/A1101 Elm Road junction
12 M11 junction 13 Cambridge West

1 Previously the 'A47 Great Yarmouth junctions', which was originally committed to starting works in 2023–24, this scheme has now been split into two schemes: the Great Yarmouth Harfreys junction, and the Great Yarmouth Vauxhall junction, the former of which achieved start of works ahead of schedule in 2022–23.

Scheme cancelled following government's April 2023 smart motorways announcement:
M1 junctions 10 to 13

Our day-to-day work on the network

Operations, maintenance and renewals

Duncan Smith,
Executive Director Operations

"Our core function is to operate, maintain and renew our network. By enabling people and freight to move around the country, these services allow economic growth and social interaction. By working to deliver smooth-flowing traffic, we play a key part in reducing congestion and delays that would otherwise result in excessive carbon emissions on our network."

Operate

- We manage the daily flow and operation of 4,541 miles of road, on which some 83 billion miles are travelled every year[1].
- To keep our network moving, our operational services run 24 hours a day, 365 days a year.
- Our control centres undertake real-time traffic management across the country, and our traffic officers patrol our roads, managing any incidents safely and quickly.
- Our information systems provide customers with traffic data and alternative routes, while our weather stations and winter fleet enable safe journeys in adverse weather.
- These services are fundamental to the safety of our network and all who use it.

1: Figures as of end of 2021 from DfT data.

Maintain

- Maintenance is a continuous process for sustaining the availability, safety, performance, operation, reliability and longevity of our network's physical assets to deliver value to our customers.
- Inspections provide us with detailed information about asset condition.
- Cyclical maintenance keeps existing assets in good order, while reactive maintenance focuses on fixing assets when they fail unexpectedly, for example potholes.
- Our incident response includes repairing assets damaged from incidents on our network, such as a road traffic collision, and our severe weather service (such as salting the roads in winter).
- We also undertake activities off the carriageway, such as clearing litter and removing graffiti, activities which are just as important to our road users.
- We maintain our soft estate, including thinning woodland, cutting grass and vegetation. This is essential to maintaining the biodiversity and habitats alongside our roads.
- By maintaining our assets, we are able to balance the need for more expensive capital investment, which is also typically more disruptive for road users. Because of this, effectively delivered maintenance activities are a primary driver of customer satisfaction.

Renew

- We replace or refurbish assets as they reach the end of their service life to keep our network in a safe, durable and sustainable state.
- We plan our renewals based on our understanding of current asset condition and future asset need, balancing performance, available funds and our Licence commitments, working to minimise disruption to road users and neighbouring communities.
- Our work includes both reactive and proactive capital expenditure. For example, while we replace assets that are no longer functioning, we also replace assets that are functioning but where the risk of failure is deemed to be too high.
- Assets that are covered include:
  - road surfaces
  - over 20,000 structures

– tunnels
– safety barriers
– drainage
– geotechnical assets (the earthworks below road surfaces and neighbouring land)
– roadside technology
– lighting assets
– estate
– ancillaries (such as footpaths and pedestrian crossings)

Asset management

We are an asset-intensive company and asset management is at the centre of what we do to deliver the service to our customers in the most affordable and safe way. Operations, maintenance and renewals are core asset management functions.

As part of our commitment to improving our asset management maturity, we strive to provide our customers with the level of performance they expect from our assets, while delivering the service in the most efficient and effective way that demonstrates value for money. Our approach to asset management sets the direction for delivering on our KPIs, particularly around providing a well-maintained and resilient network.

In 2022–23, we improved our asset management capabilities by updating our corporate objectives, including our performance indicators. We also set the direction for key assets through publishing asset class strategies on our internal intranet. These strategies set our ambitions for each of our assets in the context of any challenges facing, or opportunities existing or emerging in, the infrastructure and road sectors. They are supported by our asset class handbooks, which provide guidance for moving from strategy to delivery, and inform our investment planning process.

We published strategies for structures, road surfaces, drainage, geotechnical assets, lighting and safety barriers. Further strategies for roadside technology, tunnels, our soft estate and ancillary assets are in development and will soon be launched internally.

Asset management principles

Focus on customer service

We provide the right road network that delivers the right service to our customers and communities.

Make efficient use of available resources

We understand the current and future needs of our assets, allowing us to make efficient, appropriate and timely interventions to optimise cost, risk and performance.

Consider the whole life of the asset

Our decisions are underpinned by whole life cost considerations. We consider value for money and long-term affordability of the services that our assets provide to our customers. This considers the impact that we have on the environment, including meeting our net zero commitments.

Align our strategic plans and delivery

We have published a long-term vision for the SRN and have programmes of works, set out in government's RIS2 and our *Delivery plan.* We work in line with our organisational objectives of safety, customer, digital and carbon.

Manage our asset risk effectively

We manage our asset risks through appropriate mitigation and controls, supported by our policies, standards and governance. Intelligent use of data informs our management of risk and resilience to events that impact our network, including climate change.

Empower and connect our people

We empower our people by providing them with the right capability, training and skills. A consistent asset management approach is promoted within our company through regular communication.

Intelligent asset management and digital operations

We are making a step change in the use of technology for managing our structures. Our ambition is to maximise the benefits of recent and rapid digital advances to reduce human intervention on-site, and facilitate automated inspections and remote monitoring. This should reduce the number of unplanned interventions on our network, improving customer experience.

Initially, the focus for this work will be post-tensioned concrete structures, which are recognised as requiring a greater level of scrutiny than most other structure types. We have already completed a feasibility study, which identified a shortlist of technologies from across industrial sectors with the potential to advance the condition-monitoring of post-tensioned bridges. Some of these ideas are well developed and ready to be tested on our network; other ideas require further research and development. We have already started trials on sections of a redundant viaduct stored at a National Highways depot, using Muon Tomography and Hyperspectral Imaging.

Our investment

£10.8 billion

committed for investment into operations, maintenance and renewals over the second road period

£1.6 billion

invested in 2022–23

£700 million in operations

£240 million in maintenance

£700 million in renewals

£4.8 billion

invested in total since the start of the second road period

£2.1 billion in operations

£735 million in maintenance

£2 billion in renewals

Investment has remained at consistent levels in 2022–23, as we continue to deliver our second road period commitments.

Our performance and progress

KPIs and performance indicators (PIs)

Our work across operations, maintenance and renewals directly contributes to our company performance, especially across the following KPIs for the second road period:

Key performance summary

KPI	Our targets and ambitions	Our 2022–23 results and performance	RP2 cumulative performance
Providing safe and reliable journeys	Ambition that average delay per mile driven will be no worse by the end of the second road period compared to the end of the first road period.	In 2022–23, we achieved a result of 9.5 seconds per vehicle per mile, not meeting our ambition.	[Chart]
	43m maximum limit of network lane-metre-days impacted by roadworks per month, the roadworks network impact (RNI) KPI.	In 2022–23, we achieved a score of 42.3m, achieving our target to remain under the maximum limit of 43m.	[Chart]
	86% of motorway incidents cleared within one hour, based on 24-hour coverage.	We achieved a year-to-date monthly average of 87.2%, exceeding our target by 1.2%.	[Chart]
A well-maintained and resilient network[1]	95% of road surface in a condition that requires no further investigation for maintenance for the first two years of the second road period.	At the end of 2022–23, we ensured that 96.2% of our network was in good condition, exceeding our target for the year.	[Chart]
	95% of roadside technology available at all times.	At the end of 2022–23, we ensured that our roadside technology was operational 95.3% of the time, meeting our ambition for the year.	[Chart]

1 From 2022–23, we are reporting against a new network condition metric, which aligns better with our asset management strategy, covering all lanes of the main carriageway.

Key actions and wider progress in 2022–23

We have kept our network open and fit-for-purpose, including delivering upgrades to enable the continued reliability of our assets into the future.

Operations

- We improved attendance times for traffic officers on all lane running motorways where emergency areas are more than a mile apart. We reduced the time from 11 minutes and six seconds at the start of the year to ten minutes or lower for each of the last six months of the financial year.
- During the year, our traffic officers dealt with over 65,000 incidents causing an obstruction, congestion or threatening safety on our network.

Maintenance

- The timely and efficient repair of defects is an important part of keeping our customers safe when using our network. During 2022–23, we repaired a total of 19,839 defects within 24 hours of identification.
- Our technology assets play a key role in how we operate and manage our network. In 2022–23, we achieved our ambition of 95% technology availability, which is an increasingly important performance indicator because of our growing reliance on technology for managing traffic flow on parts of our network.

Renewals

- We met the needs of our customers and our assets by:
  - delivering 1,000 lane miles of asphalt resurfacing
  - renewing 240 miles of road safety barriers
  - delivering 6 miles of new concrete safety barriers
  - refurbishing or repairing 48 miles of concrete roads
- We continued the delivery of our significant structures' renewals programme. This included working on Bamfurlong Lane, which carries a local road over the M5 in Gloucestershire. The need for essential refurbishment was identified through our routine bridge inspections, and includes concrete repairs, replacement waterproofing, fencing and resurfacing. These activities demonstrate our commitment to good asset management, ensuring the bridge continues to be safe for our customers.

We delivered
1,000
lane miles of asphalt resurfacing

We renewed
240 miles
of road safety barriers

We delivered
6 miles
of new concrete safety barriers

We refurbished/repaired
48 miles
of concrete roads

Case study

Completing our M60 Palatine Road Bridge repair scheme

About this scheme

Context

The Palatine Road Bridge carries the M60 over the River Mersey and Palatine Road, near Manchester. The M60 is one of the busiest motorways in the North West, used by 80,000 drivers every day.

This bridge has been in place since the motorway first opened in 1974, as part of what was then the M63. We identified that the bridge needed extensive repairs on its supporting piers to ensure motorists could continue to travel safely and reliably.

Our scheme

In 2019, we started a £13 million scheme to repair all 15 bridge piers. This involved removing defective and deteriorated concrete and reconstructing the existing bridge pier crossheads beneath the live M60.

We carefully phased how we worked and we used precise hydro-demolition techniques to remove the concrete in smaller sections. This had very limited impact on the load-bearing capacity of each pier crosshead and removed the need for propping the bridge deck during the works. We also completed most of our scheme away from our network and beneath the bridge, with minimal to no traffic management involved. This meant, as well as keeping the 200-metre-long bridge safe, we also kept customers moving throughout our works.

We finished our scheme nearly a year ahead of schedule in November 2022. We now envisage that the bridge will not require any significant work for around 25 years.

We invested

£13m

in vital repairs

We repaired

15

bridge piers as part of the scheme

We finished

11

months ahead of schedule

We saved

c.£8m

through innovative delivery

We achieved

64

fewer closures of the M60 than originally planned

Wider impact

The completed repairs mean that the bridge is now safe to carry traffic for the foreseeable future without any weight restrictions, benefiting local and national movement of goods and people.

As part of the project, we completed a series of wider improvements to the site, including providing picnic tables for the local community to enjoy the riverside location.

The site team donated £500 to St Wilfred’s Children Centre in Northenden to help in purchasing art and craft materials. We also gave a £500 donation and a 55-inch LG TV to Wythenshawe Community Initiative Children Charity, based in Woodhouse Park Family Centre.

Case study

May 2022: Celebrating 50 years of the Spaghetti Junction

Our Gravelly Hill Interchange (commonly known as Spaghetti Junction) celebrated its 50th birthday in May 2022

The Spaghetti Junction carries over 200,000 vehicles each day and forms part of the M6 travelling through the West Midlands. It also links traffic travelling in and out of Birmingham city centre because of its connection with the A38.

It is a vital piece of infrastructure for the UK economy and continues to play a major part in helping freight and logistics companies move goods around the country.

Over the years, it has played an important role in enabling goods, people and business to flow in and out of the region. Most recently, it played a pivotal role during the Commonwealth Games in enabling athletes, sports enthusiasts and tourists to move around the area.

With such high numbers of vehicles using the junction every day, the structure requires constant maintenance and inspection by specialist teams from National Highways to help keep it safe for motorists.

Spaghetti Junction carries

200,000

vehicles each day

Case study

Progressing our concrete roads programme

About this scheme

Context

Most of our network is surfaced with asphalt, also known as blacktop or tarmac. However, around 400 miles (around 8%) of our network is built of concrete, with some of these roads having a shallow asphalt overlay.

Our concrete roads can be found across the entire network, with a high concentration along the east of England. As well as enabling customer journeys, concrete roads provide vital passage to some of the UK's ports in the south east and north east.

Our concrete roads were built largely in the 1960s and 1970s, when traffic volumes were half of what they are today. Some concrete road sections were also constructed in the late 1990s. After decades of safe use and hundreds of millions of journeys, these roads are now nearing the end of their working lives. They need vital upgrades to ensure they remain safe, dependable and durable. Better surfaces will also boost ride quality and reduce noise for many years to come.

Our programme

Through a process of planned life extension works and major reconstruction works, we will gradually replace the existing rigid concrete road surfaces with flexible asphalt. By the end of 2045, we plan to have removed all concrete road surfaces.

The first part of this programme will see us invest £393 million in the second road period. As part of this work, we will extend the lifespan of some roads by 5–10 years, for example by repairing potholes and cracks. We will also fully reconstruct others, replacing the old surfaces with modern road surfaces. These will have a design life of up to 40 years, and repair work will be easier and faster.

In 2022–23, we started three of the six major reconstructions schemes planned for the second road period: A11 Spooner Row; A12 Marks Tay; and A12 Margaretting. These schemes represent a combined investment of around £155 million.

In May 2022, for example, we started the A11 reconstruction scheme. We subsequently reached the scheme's halfway point in January 2023 with the completion of the northbound dual carriageway section. We remain on track for completion in late summer 2023, and anticipate delivering around 33km of fully reconstructed flexible road surface. We will also take the opportunity to deliver drainage, safety barrier and signage upgrades.

We have recycled most of the concrete and sub-base material we removed from the A11 back into the scheme. We have also had a strong focus on stakeholder engagement, holding multiple and wide-ranging events both before and during the scheme to communicate our plans, expected impacts and future benefits.

In October 2022, we started the A12 reconstruction scheme. Our plans involve completely removing the concrete road surface and some of the foundations, which will mean removing a total of approximately 70,000 tonnes of concrete. As part of our commitment to sustainability, we will then crush and recycle the concrete to form the road foundations, before laying new asphalt. We expect to finish by late 2023 or early 2024, subject to weather conditions.

We anticipate delivering around

33km

of fully reconstructed flexible road surface through our A11 Spooner Row scheme.

Wider benefits

Repairing and reconstructing our concrete roads will require new technology and techniques, helping us take full advantage of lower-carbon materials and techniques.

At the start of the second road period, we established a Concrete Roads Centre of Excellence to test new technologies, tools and processes. The centre is also responsible for delivering the early stage 0–1 outputs, leading to the scheme scope and preliminary design. Key 2022-23 updates:

- The Centre of Excellence continued the development of K-Portal, a digital platform that provides asset management updates and acts as a programme development, design, construction and asset management tool. It is one of the technologies listed in our Digital Roads plan, and is anticipated to create savings of between £30,000 and £154,000 on every scheme it is used on.
- The Centre of Excellence joined the Cambridge University Digital Roads Programme to investigate future survey, asset management and repair technologies relevant to our concrete roads programme.

Case study

Facilitating abnormal load movement on the M53

About this scheme

Context

We were asked to support the movement of an ‘abnormal load’, which was part of a £45 million furnace project to be installed at Essar’s Stanlow oil refinery.

After arriving by ship from Thailand to the Port of Liverpool in June 2022, the last leg of its 6,000-mile journey was along our M53 in Cheshire. It then moved onto the A5117 local road, before being delivered to the oil refinery.

Our action

We considered several options before we finally found the solution for the load to straddle the central reservation of the M53, travelling simultaneously on both carriageways on two self-propelled 34-axle transportation units.

We assessed all our bridges for this unique load before the movement took place. We also removed a number of lighting columns and signs from the central reservation, as well as boundary fencing and safety barriers. We then restored these as the load passed, apart from lighting columns which were due to be withdrawn from use in the near future.

The operation took place during an overnight closure in August 2022, when traffic was light. It required precision measuring and monitoring at every stage, and the journey took several hours as the units moved at walking pace.

The new furnace section was one of the largest objects ever to be moved on UK roads, and is a tangible example of our support for UK industry. This project at the refinery also centres around the reduction of carbon emissions, and is an example of our support for reducing the nation’s carbon footprint.

The cargo was:

26.5

metres long

twice

the length of a road-going oil tanker

14.2

metres wide

878 tonnes

in weight

18.5

metres tall, almost

five times

the height of a double-decker bus

Case study

Gathering vital information from routine inspections: Exe viaduct

About this scheme

Context

The Exe viaduct carries the M5 over the River Exe near Exeter in Devon, providing a critical link into and out of the South West. The viaduct is a concrete structure just under 700m in length, strengthened by wire strands that pass through it. Closing the viaduct would have huge impacts on Cornwall's connectivity to the rest of the country, requiring diversions of around 150 miles.

We carry out routine inspections of this structure on a biannual basis, general inspections every two years and principal inspections every six years.

Following an inspection in June 2015, we identified a broken strand in the viaduct's post-tensioned system. A subsequent inspection found two more broken strands. To safeguard this essential structure, we undertook structural remedial works, which we completed in 2018. As part of this work, we installed an acoustic monitoring system to detect any future breaks.

Our action

In December 2022, the acoustic monitoring system sent us an alert, triggered by a fractured expansion joint plate. As this was an immediate safety hazard, we sent traffic officers to attend the scene and install a lane closure.

The repair work required specialist input which needed to be procured through the Schemes Delivery Framework. To ensure the safety of road users, we kept this lane closure in place over the Christmas period until the specialist contractor could be mobilised.

In early January 2023, we worked with our supply chain partners to complete the necessary remedial work. The carriageway fully reopened on 13 January 2023.

The viaduct is a concrete structure just under

700m

in length, strengthened by wire strands that pass through it

National overview

Mike Wilson,
Chief Highways Engineer

“We want everyone who works with us, and everyone who travels on our network, to get home safe and well. To achieve this requires fresh thinking and innovative approaches towards health, safety and wellbeing across our organisation, supply chain and the industry as a whole.”

Home safe and well **approach**

Aims

Launched in 2019, our *Home safe and well* approach brought our health, safety and wellbeing plan to life, creating a less prescriptive and more collaborative way of working to increase safety. By 2025, through our *Home safe and well* approach, we aim to:

Halve
the number of people killed or seriously injured on our roads

Halve
the number of lost-time incidents in our company

Halve
suicides on our roads

Halve
service strikes

Halve
vehicle incursions into roadworks

Halve
bridge strikes

Achieve
the Workplace Wellbeing Charter for England

Achieve
a standard equal to ISO 45001 for our occupational health and safety management system

Double
our hazard and near-miss reporting

Achieve
level 4 cultural maturity on the ‘Hearts and Minds’ model

Reviewing our approach

In 2022–23, we made progress through a variety of projects and initiatives, as set out in this annual report. However, we know our aspirations are stretching and we have much more work to do.

In October 2022, we started a full review of the *Home safe and well* programme, looking at both qualitative and quantitative data to evaluate outcomes, delivery and our people's needs. Access the full *Home safe and well review* here.

From April 2023, following the results of this review, we will refresh our programme of work. We will, however, continue to deliver in a similar way, with corporate-level activities and specific directorate-level plans all aligning to a set of focus areas.

Safety and congestion fund

Objective of the fund

As set out in government's RIS2, we have ringfenced funding of £958 million for four designated funds across the second road period. These funds support projects to improve lives, increase accessibility, protect the environment and support the nation's economy. As part of this, we have a dedicated Safety and congestion fund.

Aim

To improve safety on high-risk roads, accident-cluster locations and potential suicide-cluster areas.

Focus

To make improvements to our A-roads, where accident rates are generally higher, and address congestion.

Key 2022–23 achievements

We invested

£28.4 million

from this fund in around

127 projects

aimed at improving safety or congestion.

We added

three

suicide prevention schemes into our programme, bringing the total to 18 schemes over the road period to date. These focused on increasing the height of parapets, acting as a deterrent for attempted suicides.

We completed a barrier gap closure project on the M5 junctions 9–12 in the South West.

Through this project, we installed over

31,000 linear metres

of new safety barriers to reduce collision severity by helping to prevent vehicles from leaving the carriageway when an incident occurs.

International Road Assessment Programme (iRAP)

The iRAP star rating is an objective way to measure the level of safety that is 'built in' to a road. The iRAP tool can be used to embed safety in the development of network-level strategy, route-level strategy, new route design and route treatments.

In 2022–23, we developed a bespoke iRAP training programme for our colleagues and partners to further improve star ratings and reduce risk. Training is subject to competency testing to ensure that those using data are competent to do so, and as such is an important aspect of our governance process.

In March 2023, we hosted clinics with the Road Safety Foundation and internal stakeholders to peer review conclusions drawn from using star rating data.

Key performance summary

Improving safety for all

Our targets and ambitions

1. **First road period KPI:** Achieve a 40% reduction in the number of people killed or seriously injured on our network by 2020, against a 2005–09 baseline average.
2. **Second road period KPI:** Achieve a 50% reduction in the number of people killed or seriously injured on our network by the end of 2025, against a 2005–09 baseline average.
3. **Long-term ambition:** No one is harmed while working or travelling on our roads.

Our 2022–23 results and performance

We measure performance using Stats19 injury collision data, gathered by police. Following validation, this data is provided to us by DfT and summarised in *Reported road casualties Great Britain*. The most recent available validated data is for 2021, released by DfT in September 2022. Data for 2022 will become available in autumn 2023.

Drawing comparisons against our 2005–2009 baseline, in 2021, the number of people killed or seriously injured reduced by 42%* and fatalities reduced by 38%. Casualties were 55% lower and the number of child casualties reduced by 52%. These casualties were from a total of 6,539 collisions in 2021, which is 53% fewer collisions when compared to the baseline average. Of those collisions, 1,575* resulted in death or serious injury, a 41%* decrease on the 2005–09 baseline.

These figures are still influenced to some extent by lockdown measures and other changes in travel habits associated with the pandemic, especially in the first quarter of 2021. However, we can also consider the performance of Great Britain's road network as a whole, which may have been experiencing similar changes and travel patterns. 2021 performance is compared with 2019 due to the distortion in 2020 figures arising from the pandemic conditions.

In 2021, there were 128,209 reported casualties in Great Britain. Of these, 9,819 were on the SRN. For the SRN, this represented a decrease of 20% when compared against 2019 and a decrease of 16% when compared across all roads in Great Britain. The percentage share of reported road casualties also reduced – SRN casualties comprised 7.7% of Great Britain's road casualties in 2021, compared with 8.1% in 2019.

Casualties overall were

55%

lower and the number of child casualties reduced by

52%

Percentage change in casualties in 2021, when compared with 2019[1]

	Percentage change across Great Britain in 2021	Percentage change on our network in 2021
Deaths	-11%	+6%
People killed or seriously injured	-11%*	-12%*
People slightly injured	-18%*	-22%*

1 2020 is omitted for performance comparisons because of the very low traffic flows associated with pandemic conditions.

* Figures marked with an * are adjusted figures. The Office of National Statistics (ONS) has developed a methodology to quantify the effect of the introduction of injury-based reporting systems (CRASH and COPA) on the number of slight and serious injuries reported by the police, and to estimate the level of slight and serious injuries as if all police forces were using injury-based reporting systems. Further details of the severity adjustments and when they are recommended can be found in the Guide to severity adjustments.

[Chart]

Number of casualties and rates (casualties per hmvm*)

	Number of casualties				Rates (casualties per hmvm*)		
	Fatalities	Serious injuries	KSIs	Traffic (hmvm*)	Fatalities	Serious injuries	KSIs
Motorways	80	649	729	531.0	0.15	1.22	1.37
All A-roads of which:	142	985	1,127	300.7	0.47	3.28	3.75
Dual carriageway A-roads	103	698	801	254.4	0.40	2.75	3.15
Single carriageway A-roads	39	287	326	46.2	0.84	6.21	7.05
Whole SRN	**222**	**1,635**	**1,857**	**831.6**	**0.27**	**1.97**	**2.23**

Figures in the table have been rounded up

*Hundred million vehicle miles

Working to keep our customers safe

We want our customers to be safe and feel confident in their journeys. We design and deliver safety schemes to meet the specific needs of each region, and we also support targeted safety research to improve our understanding. Recognising the importance of increasing awareness to improve driver behaviours, we have run a series of targeted communications campaigns. As we know that employers have a key role to play in the safety of drivers, we have delivered wide-ranging initiatives through our Driving for Better Business programme.

Key safety schemes

During 2022–23, we ran a series of initiatives and communications campaigns to increase awareness and improve driver behaviour. These included:

Mobile phone and seat belt detection

Spring 2022

Overview

From spring 2022, we trialled the use of mobile phone and seat belt detection systems on our sensor test vehicle[1], with the aim of enabling the systems to be used on several different road types, including a roadworks site. This will help us widen our understanding of compliance across our network.

Outcomes

The sensor test vehicle has been deployed 73 times, and has detected 613 phone offences as well as 2,457 seat belt offences.

The system was deployed across several police forces. Some have taken forward prosecutions using the evidence gathered by the system for both seatbelt and mobile phone offences.

1 The Sensor Test Van was funded by our designated funds programme four years ago, and is operated by AECOM. It is adapted to function as a test platform for various enforcement systems. Adaptions include welfare facilities for onboard operators and IT equipment to provide support for the sensor arrays and power supplies. It also has a four-metre extendable boom to mount the test equipment. It is currently being deployed with artificial intelligence cameras identifying handheld mobile phone use and non-wearing of seat belts.

Suicide prevention: ‘raising the bar’ guidance

November 2022

Overview

We developed and distributed guidance to help our supply chain identify and respond to suicide risk in both design and construction phases, as well as signposting to crisis intervention training and support.

Outcomes

We updated reporting processes, enabling us to monitor where suicide events occur on our network, check the training people have received and ensure the appropriate follow-up care is given.

Key safety campaigns

Know the zones

February 2023

Aim

- Educate drivers on how to drive safely around heavy goods vehicles (HGVs) and understand HGV blind spots and areas of limited visibility
- Core message: ‘know the zones’

Facts and stats

One in five incidents where someone is killed or seriously injured on the SRN involves an HGV

Don’t be a space invader

September – October 2022
(running consistently since 2018)

Aim

- Encourage drivers to adopt safer following distances, including the two-second rule

Facts and stats

Post-campaign evaluation:

- 72% prompted familiarity with the two-second rule
- 84% stated that they knew what to do if they found themselves tailgating or too close to the vehicle in front

Summer vehicle checks

July 2022

Aim

- Tackle preventable breakdowns
- Encourage road users to check tyre pressure and perform other vehicle checks
- Core message: ‘safe tyres save lives’

Facts and stats

- Yearly peak in the number of people killed or seriously injured on the SRN during the summer school holidays
- 40% of breakdowns on our network could be prevented by simple vehicle checks ahead of travel

Post-campaign evaluation:

- 88% acknowledged the importance of checking tyre pressures
- 78% agreed that tyres should be checked before each long journey

Go left

August 2022, December 2022 – January 2023

Aim

- Help customers know what to do if they break down on the motorway
- Core message: ‘go left’

Facts and stats

Post-campaign evaluation:

- 47% spontaneous recall in seeing or hearing about our campaign
- Eight in 10 drivers now agree that ‘go left’ is the most important action

BikerTek

April to September 2022

Aim

- Improve the riding behaviours of motorcyclists during biking season, covering speed, cornering, overtaking and fatigue

Facts and stats

Post-campaign evaluation:

153,000 motorcyclists say they now ride more safely as a result of our campaign

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Red X

February 2023

Aim

- Raise awareness of the Red X and why it is important to follow the signs on our network

Facts and stats

The majority of drivers (over 90%) comply with the Red X, and this campaign reminds everyone of the importance of compliance

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Driving on motorways

May and June 2022

Aim

- Increase awareness of the key features of motorways, with and without a hard shoulder
- Featured TV presenters Suzi Perry and Ortis Deley, who explain how smart motorways work and what drivers need to know

Facts and stats

Post-campaign evaluation:

- Campaign recognisers felt more confident than non-recognisers (47% versus 33% respectively)
- Campaign recognisers were more aware of the correct actions to take if a vehicle stops abruptly (61% versus 51% respectively)

Our Driving for Better Business programme

Data shows that at least a third of injury collisions involve someone driving for work. Driving for Better Business is our government-backed safety programme, based on the knowledge that employers have a critical role to play in the safety of drivers.

Vision

A world where those who use the roads for work do so safely, efficiently and sustainably.

Mission

To improve safety for all those who drive or ride for work by sharing good practice and demonstrating the significant business benefits of managing work-related road risk more effectively.

Membership and partners

We now work with over 700 organisations through our programme, reaching:

3,829,350

drivers

1,370,841

cars (including grey fleet)

1,778,163

vans and light commercial vehicles

578,059

trucks and HGVs

(As of March 2023)

Part of the success of our Driving for Better Business programme has come from our commitment to collaboration and partnership. During the year, we recruited many new partners, including trade associations, fleet safety providers, media outlets and vehicle leasing companies. Together, they provide a way of reaching a significant number of the fleet operators across the UK. They extend the reach of our campaigns and messages by engaging and influencing their networks and customers. Our partners in 2022 include:

- Welsh Government
- Health Assured
- Civil Engineering Contractors Association
- National Federation of Roofing Contractors
- Fleet Operator Recognition Scheme
- Hire Co
- Confidential Incident Reporting & Analysis Service (CIRAS)
- BAM Nuttall
- Parcel Carriers Association
- Road Safety Markings Association

Quarterly campaign focus

Each quarter, our campaign focuses on one of four key challenges in managing work-related driver safety. Content includes:

- podcasts
- videos
- articles
- customer case studies, featuring partners, industry experts and good-practice fleet operators

The subjects outlined below are just some of the topics our programme has focused on:

Apr | May | Jun **Compliance**
• Risk assessments

Apr | May | Jun **Compliance**
• Policies and procedures • Management gaps
Jul | Aug | Sep Leadership
• Good practice • Communication • Business benefits
Oct | Nov | Dec Safe vehicles
• Roadworthiness • Safety technology • Loading and usage
Jan | Feb | Mar Fitness to drive
• Driver impairment • Driver fatigue • Driver wellbeing

New employer portal

In 2022, we launched the new Driving for Better Business employer portal, which allows multiple users within each organisation to use our online tools, save reports and share resources with their drivers. It also allows employers to track progress through our best practice driver safety management framework. Over 700 employers, collectively managing three million drivers, are already using our new portal.

Local business engagement campaigns

In 2022, we began working with road safety professionals and casualty reduction partnerships across Kent, Warwickshire, Oxford, Staffordshire, Bedfordshire and the West Midlands. We developed local business engagement programmes that these organisations could deliver themselves. We supported with expertise, events and educational materials and facilitated the sharing of good practice between partners and a 'local' landing page on the Driving for Better Business website.

Supply chain and industry collaboration

We worked with procurement to set a standard for our supply chain for major projects. This sets out the health and safety requirements for work-related road risk and for our supply chain to evidence they are meeting their duty of care. Setting this standard helps us meet our own duty of care towards managing contractors, as well as providing assurance that our contractors are operating as safely as possible.

We continued our collaboration with the Rail Safety & Standards Board to improve the management of work-related road risk across the whole industry in the UK. In 2022, we worked together to establish road risk champions across the rail industry. We also worked with train operating companies and freight operating companies to complete the Driving for Better Business gap analysis and register with our portal. By using telematics, Network Rail identified a speeding issue amongst their van drivers. To help tackle this, our programme assisted in the development of a speeding campaign, 'What's your excuse?', launched in May 2022.

The rail industry has its own landing page on the Driving for Better Business website to inspire and encourage the industry to engage and lead on managing road risk. We are working with other sectors to create additional industry landing pages.

Seeing tangible benefits across our supply chain

Many of our Tier 1 contractors are members of our Driving for Better Business programme:

- Balfour Beatty, a construction company who manage the road risk of around 12,000 drivers, reported that over the last six years their crash frequency rate fell by 63%, equivalent to £570,000 of annual benefits.
- Amey, responsible for 11,000 drivers, reported at-fault incidents down 38% over 12 months from 1,380 in 2016 to 89 in 2018.
- Tarmac, part of the CRH group, saw a 10% decrease in speeding across all geographical areas (25% in the North and Scotland) and a 48% reduction in its insurance claims. Continued focus on risk management has even seen insurance claims fall consistently year-on-year, from 589 in 2016–17 to 255 in 2019–20, a reduction in claims of nearly 50%.
- Dave Conway, Road Safety Manager at FM Conway, a transport and construction company, says: “If you are going to persuade a business to adopt these systems, there needs to be a business case. Within the first year of adopting the system, we found ourselves with a £56,000 reduction in our fleet insurance premium. That’s a sound business case.”

Safety events

We engaged with driver safety professionals at four major events held at the NEC in Birmingham, including the Commercial Vehicle Show, The Emergency Services Show and Fleet and Mobility Live.

Our flagship event was the Health and Safety Event in April 2022, where we hosted the Driver Safety Zone and Theatre, presenting three days of seminar content with help from our partners and registered operators. The event targeted approximately 100,000 safety professionals in the UK, amongst whom driver safety is commonly identified as one of their top three risks to manage.

Commercial vehicle incident prevention

Using our Operation Tramline HGVs as part of road safety campaigns

We loaned three plain white HGV tractor units to police forces to help improve safety for drivers on our network in England and Wales. Entitled ‘Operation Tramline’, the national project aims to change driver behaviour and discourage non-compliance. The elevated position of the HGV cabs allows police officers to drive alongside vehicles to film any unsafe driver behaviour.

Since Operation Tramline began in 2019, the project has stopped 30,624 vehicles, identified 33,524 offences and resulted in 34,171 interventions being dispensed. The top three offences detected were:

1 Seat belt offences
2 Mobile phone use
3 Driver not in proper control

As well as the weekly operation of the three unmarked HGV cabs in the North, Midlands and South, we also co-ordinated the following route-based road safety campaigns:

1. **Operation Vertebrae** took place along the M6 in June 2022. Five forces took part in this project’s week of action: Lancashire; Merseyside; Cheshire; Warwickshire; and Central Motorway Police Group. The North-West Commercial Vehicle Unit and local road safety partnerships also joined. In total, the project led to 412 vehicles being stopped by police in unmarked cabs, with 387 offences recorded.
2. **Operation Orbital** took place on the M25 in November 2022. Six forces took part in the week of action, including the Driver and Vehicle Standards Agency (DVSA). In total, the project led to 430 vehicles being stopped, with 468 offences

recorded.

3. **Operation Mainline** took place on the A1M in Northumberland, Durham and North Yorkshire. The fortnight of action was run in March 2022. Four police forces took part, with 126 vehicles stopped and 121 offences recorded.
4. **Operation Freeway** took place on the M1 in March 2023. The week of action led to 663 vehicles being stopped, with 691 offences captured and 700 interventions issued.

The Operation Tramline HGV cab in the North region, together with Durham police, also supported the Project Edward road trip 2022.

In March 2023, the Operation Tramline project won the National Highways Industry Award for 'Exceptional contribution to road user safety'.

Operation Orbital:

430

vehicles stopped

468

offences recorded

Operation Vertebrae:

412

vehicles stopped by police using unmarked cabs

387

offences recorded

Operation Ping: close-following opt-in trial

In 2022–23, we launched an in-depth technical feasibility study for Operation Ping, which aims to inform commercial vehicle operators of compliance issues on our network. This is an opt-in process for operators, offered on the understanding that they improve standards without further enforcement. It is only available when the technology is not being used for direct enforcement. Through this feasibility study, we are looking at the type of assets available on our network and the possibilities around capturing data to support future rollout.

Our study builds on early work and the significant participation from operators to date. The study has, for example, built upon the previous limited proof of concept to understand the feasibility of increasing scale and breadth.

After review of nine potential data sources and discussions with stakeholders, the Operation Ping concept is feasible with some but not all data sources. The main limiting factor is the availability of sensors on the SRN which are not being used for enforcement. Fleet operators remain exceptionally keen and supportive of the concept.

Recent engagement has resulted in 64 companies expressing interest, of which 33 companies have shared their database of vehicle registrations. A robust three-month trial of the Operation Ping concept is being planned for September 2023, jointly funded by the Roads Policing Review and DfT.

Continuing our effective campaigns and collaborations

Dashcams in the South West	In 2022–23, we continued collaboration with Devon and Cornwall police and Vision Zero South West on a project to provide organisations in the South West with dashcams. This supports road safety enforcement and drives home the message that dangerous or illegal driving will not be tolerated.
Fresnel lenses	In 2022–23, we procured a new contract to continue to distribute Fresnel lenses across England to help drivers of HGVs have a better view of their blind spots. Our data shows that side-swipe collisions from HGVs on our network have decreased since 2015 when we started distributing the lenses. Total collisions involving left-hand drive HGVs changing lane to the right, for example, has reduced from 155 in 2015 to 25 in 2021. We are distributing a further 3,750 Fresnel lenses to non-British commercial drivers in April and May 2023.
Mobile tyre safety	Our mobile tyre safety station continues to be used by stakeholders and operators such as

station	Royal Mail Group, Tesco, Morrisons and DPD to record tyre pressure and tyre tread depth of vehicles weighing up to 7.5t. The project has received recognition within the tyre safety community by winning a TyreSafe award in July and a Brake award in October.
North West Commercial Vehicle Unit	The North-West Commercial Vehicle Unit is now sustained as a business-as-usual activity, funded by the police. The DVSA has committed to the ongoing provision of a full-time examiner. The data collected gives valuable insight into the nature of non-compliance on our network, allowing us to better target future road safety initiatives.
Guidance packs for van and truck drivers	In 2022–23, we delivered against our commitment to support van and truck drivers, a high-risk demographic for suicide risk and mental health challenges. We distributed 3,426 guidance packs, building on the 25,000 already delivered in 2021–22, to an additional 56 companies. The total number of companies now stands at 430. Developed with the Campaign Against Living Miserably (CALM) suicide prevention charity, CALM tells us that typically these types of campaigns generate calls to their crisis line from around 2% of the individuals reached. It is estimated that CALM prevents an imminent suicide once in every 400 to 500 calls.
Guidance for non-UK professional drivers and fleet operators	In 2022, we continued our collaborative work with DfT, the DVSA and wider stakeholders to produce guides for non-UK professional drivers and fleet operators. These covered topics ranging from vehicle, equipment and document checks to driving rules on our network and what to do in an emergency. We increased the available languages to 15 and distributed the guides through our traffic officers as well as to DVSA inspection depots, ferry companies, truck stops near the Port of Dover and targeted fleet operators.
Behaviour change and social research study	We have continued supporting the development of a study run by the Behaviour Change and Social Research Team. This has led to the launch of two guides in October 2022 during Project EDWARD to help organisations change driving behaviour and encourage good vehicle checking habits. These are now being promoted through our programme.

Fatal reporting and research

Post-collision fatal reporting

Following an independent review in December 2020, we refreshed the post-collision fatal reporting process. We developed the new version through consultation with operational teams responsible for delivering the process, and launched the updated process in spring 2022. An audit of the process in winter 2022 found that it was well understood and delivered on its purpose.

Fatal research study

Now in its sixth year, our fatal research study examines the findings from forensic collision investigators. Our study aims to help identify causes and develop countermeasures across three factors: safe roads; safe vehicles; and safe people. This study has not only significantly improved our awareness of collision causation factors, but has provided unique insight into why death occurs in some collisions.

For example, in 2022–23, it allowed us to gather intelligence on single-vehicle collisions and young drivers. External assessment shows that we are pioneering in-depth collision research.

Looking after our people

Our *Home safe and well* approach has continued to evolve throughout the year, with directorate plans being updated and our 'Be the Change' leadership programme taking exciting steps forward.

Our safety performance: employee and supply chain accident frequency rates

- Our lost-time incident frequency rate has remained at 0.18.
- Our accident frequency rate has decreased from 0.05 to 0.03 (4 RIDDOR accidents).
- The lost-time incident frequency rate of our supply chain has increased from 0.15 to 0.17 (59 lost-time incidents).
- The supply chain RIDDOR accident frequency rate has increased from 0.07 to 0.08 (28 RIDDOR accidents).

Health, safety and wellbeing support

As the nation moved out of the pandemic in 2022, we worked with our occupational health provider to provide support for people with long Covid-19. This included assessment and physiotherapy, where clinically indicated, to help alleviate symptoms, allowing people to remain in work or to return to work, supported by reasonable adjustments where necessary.

We made 3,081 occupational health referrals in the last 12 months. These helped our people remain in work or return to work. They also provided line managers with the knowledge to support their teams, when required. We continue to provide display screen equipment assessments and reasonable adjustments to support our people, both in the office and in home-working environments.

Supporting mental wellbeing and good mental health remain high on our agenda, underpinned by both our Occupational Health and Employee Assistance programme provision and continued achievement of the Workplace Wellbeing Charter.

The 'My Healthy Advantage' app now has 867 members from across our organisation. The app supports all three aspects of our wellbeing approach: be nourished; be active; and be resilient. It has new functionality, hosting challenges for step counts, hydration and stopping smoking.

Safety cultural change

Our leadership programme, 'Be the Change', is grounded in detailed research and aims to drive a positive shift in our cultural maturity. This means moving from a culture which is more about systems-focused compliance to a stronger safety and people-centric culture. We believe this will lead to fewer injuries and incidents, and help us develop a stronger focus on wellbeing across our organisation.

Through three phases – activate, motivate and cultivate – across three years, we will deliver a range of activities and initiatives, including:

- launching three *Home safe and well* behaviours, linked to our corporate values
- holding manager workshops and providing manager coaching
- identifying and equipping ambassadors
- launching the *Just and fair* culture guide and self-assessment process
- introducing behaviour 'huddles' to front-line teams
- sharing and celebrating examples of excellent safety behaviour

We launched the programme within our Operations directorate in September 2021. During the first phase (activate), we trained 26 ambassadors in this directorate, who have since delivered 80 workshops to over 700 managers. Those managers are now leading monthly huddles with their teams to introduce the three *Home safe and well* behaviours.

We tailored and launched the programme to our Major Projects directorate in March 2022. Since then, we have trained 36 ambassadors in this directorate, who have gone on to deliver 32 workshops to senior leaders and managers. Huddles now also take place across the directorate.

In July 2023, both the Operations and Major Projects directorates will move into the 'motivate' phase of the programme.

In summer 2023, we will launch the programme across our whole company, with the aim of introducing all our people to the three *Home safe and well* behaviours.

In Major Projects:

36
ambassadors trained

32
workshops delivered

276
managers reached, who now deliver monthly huddles to their teams

Aggregated root cause analysis

During 2022–23, we started work on aggregated root cause analysis. This allows us, for certain categories of events, to examine multiple cases in a single review.

This helps us learn from comparisons, forecast possible trends and develop the right interventions. Early findings will see us focusing more on data quality, further exploitation of this method and using it to contribute to our lost-time incident reduction plans within our company.

Intelligent technology; different risks

As technology becomes more intelligent, risks change. It is important that, as we introduce more intelligent technology to our processes and people, we keep assessing risk.

For example, our traffic officers have driven the Volvo XC90 T8 since 2018. This hybrid vehicle features a number of integrated safety systems as standard. One of these systems is rear collision warning and mitigation, which uses radar sensors to scan up to 70m (229ft) behind the vehicle across several lanes, aiming to prevent or reduce the impact of collisions while reversing.

However, in 2022-23, using the principles of aggregated root cause analysis, we noted a cluster of events and near-miss reports related to the XC90 and this reversing system.

Although a useful safety feature, the system has led to lost-time injuries (whiplash from hard braking) for a small number of our people. In these cases, the sensors activated the car’s braking system while our traffic officers were reversing their vehicles on the hard shoulder.

Following a safety review, we held safety briefings with our operational teams to discuss driver actions to avoid the false activation of the reversing system.

Reviewing health safety and wellbeing risks is an important priority of our next phase of *Home safe and well*. Examples like this show us the importance of continuing to evaluate the risks our people face, especially when introducing technologies that help keep our people safe.

“As technology becomes more intelligent, risks change. It is important that, as we introduce more intelligent technology to our processes and people, we keep assessing risk.”

Protecting our supply chain

The Supply Chain Safety Leadership Group refreshed its approach to prioritise addressing key fatal risks, such as incursions, occupational road risk and occupational health, to improve safety on our network.

The group's provision of safety leadership and clear strategic direction to the supplier community has seen the adoption of health, safety and wellbeing improvement activities across the supply chain. These included improving standards and working practices to reduce incursions into roadwork sites and developing online safety training for site supervisors, also known as 'black hats'.

Black hats

The highways industry recognised that, in many instances, lost-time injuries or high-potential events, could be prevented on-site if a better and defined level of supervision was deployed.

Following an industry review of supervisor training, the Supply Chain Safety Leadership Group, working with the Highways HUB, developed a series of nine eLearning training modules to help support the development of site supervisors, known as 'black hats'.

These modules became available online in March 2023. They are the first in a series of three programmes designed to improve supervisor health, safety and wellbeing management capabilities across the industry.

"The Supply Chain Safety Leadership Group refreshed its approach to prioritise addressing key fatal risks."

Introduction

Creating a better future for everyone

Mike Wilson
Chief Highways Engineer

"We know there's a need to balance people's need to travel on our roads with doing all we can to protect and improve the environment."

Our work goes beyond the management, development and maintenance of the country's motor-ways and major A-roads. We strive to make a positive difference – for people, the economy and the planet. In the coming chapters, we detail our actions across sustainability in 2022–23.

Strategy overview and development

Our approach to sustainability is shaped by our strategies for corporate sustainability, sustainable development, the environment and social value. It also aligns with the priorities defined in our Licence.

In our Licence, sustainable development is defined as 'encouraging economic growth while protecting the environment and improving safety and quality of life for current and future generations'. This concept touches on every aspect of our business, from how we design our schemes and connect the country to how we develop our people and work with our supply chain.

Our *Sustainability strategy*

Our *Sustainability strategy* details how we will raise awareness of sustainability through engaging with our people, delivering initiatives and holding events.

It also sets out how we will comply with the Greening Government Commitments. Our strategy will help us address carbon emissions from our day-to-day operational activities, including energy use on our network and estate, business travel and water, waste and paper usage.

Protecting the planet

We balance people's need to travel on our roads with doing all we can to protect and improve the environment for current and future generations. We want our roads to work more harmoniously with the communities that live alongside them, and the built, natural and historic environments that surround them.

Our activities are comprehensive and wide-ranging, from delivering air quality initiatives and procuring renewable energies to maximising biodiversity.

See page 91 for more details

Caring about people

Our network is an integral part of people’s lives and the country’s economy, carrying more customers than any other form of transport. We want to make a difference for our customers, which means focusing on what is important to them.

We also want to consider and meet the needs of the communities who live alongside our roads. Delivering social value as an embedded part of our day-to-day work is a priority across our company. We launched Our social value plan: 2022–2024 in October 2022 and identified four action areas to strengthen the way we deliver social value. These areas focus on empowering our people and our suppliers to do the right things, while making sure we have robust governance and processes to capture, measure and evaluate the social value we deliver.

We provide a significant source of employment, both as a direct employer, and through our supply chain. We are committed to making our organisation a great place to work, with an inclusive culture and people who feel motivated, engaged and proud to work for us. Equally, we are working to further develop sustainable and long-term partnerships which encourage innovation, deliver efficiencies and provide positive social impact.

See Our customers on page 123

See Our communities on page 138

See Our employees and supply chain on page 148

Preparing for the future

We recognise the value in driving innovation and continuous improvement across all areas of our company, covering every aspect of our delivery. We explore emerging trends and the full range of opportunities presented by technology, innovation and modernisation.

See page 167 for more details

[Diagram of our Environmental Sustainability strategy]

Protecting the planet

In this section

Our approach to environmental sustainability

Our *Environmental sustainability strategy*

In 2022–23, we produced our new *Environmental sustainability strategy* (published post year-end in May 2023), setting out our vision for ‘a connected country, a thriving environment’.

In this strategy, we set out how we can continue to play a vital role in national prosperity and help protect and improve the environment. We also detail our ambitious but credible plans to achieve net zero carbon, be positive for nature and reduce local environmental impacts on communities. Our purpose is to connect the country, not just for today but for future generations as well.

Sustainability governance

Strong governance structures with clear lines of accountability enable us to deliver on our strategic sustainability priorities.

Environmental sustainability is now formally within the remit of the Safety, Health, Environment and Quality Executive Committee. This committee has oversight of our company’s environmental performance on a monthly basis. As the new *Environmental sustainability strategy* is brought into operation, the committee will also monitor progress against the strategy’s actions and commitments.

Environment and wellbeing fund

Objective of the fund

As set out in government's RIS2, we have ringfenced funding of £958 million for four designated funds across the second road period. These funds support projects to improve lives, increase accessibility, protect the environment and support the nation's economy.

As part of this, we have a dedicated Environment and wellbeing fund. This fund helps our roads work more harmoniously with their surroundings and directly contributes to a range of environmental metrics for the second road period.

We support environmental improvement and community wellbeing projects that go beyond traditional road investment and bring our network up to the latest environmental standards. Our projects range from improving biodiversity and flood resilience to preserving cultural heritage and reducing the impact of noise, light and air pollution.

Key 2022–23 achievements

- In 2022–23, we invested £69.2 million in around 274 projects, which ranged from reducing noise and delivering biodiversity units to mitigating water outfalls and flooding hotspots and reducing our carbon footprint.
- We continued delivery of our noise insulation scheme, reducing noise from the SRN at 308 properties.
- Following the construction of a noise barrier on the M6 junctions 21a to 26, we reduced noise for 313 households.
- We moved into implementation on our 'Network for nature' project, working in partnership with Wildlife Trusts. In 2022–23, this project delivered 252 biodiversity units.
- We completed our project to implement energy efficiency improvements at over 12 depots, including upgrading lighting, lighting controls and heating to reduce our carbon emissions and support our corporate carbon KPI.

We invested

£69.2 million

from this fund in around

274

projects

1,618

biodiversity units delivered

308

properties received noise insulation

313

homes with reduced noise

Climate action: our net zero plan

Almost nine out of 10 passenger miles are travelled by road and 79% of freight goods are moved by road. The Committee on Climate Change forecasts that traffic levels in 2050 will be higher than today, even taking account of the ambitious actions in its sixth carbon budget.

For Britain to be a net zero greenhouse gas economy by 2050, our roads must be net zero too. Our leadership, expected by our customers and our people, will help avoid dangerous climate change and support Britain's growth.

Our position and plan

In July 2021, we published *Net zero highways: our 2030/ 2040/ 2050 plan*, which aims to put decarbonised roads at the centre of Britain's net zero future.

For us, net zero means cutting greenhouse gas emissions to zero or near zero, rather than taking measures to offset emissions.

In August 2022, following our first year of delivery, we published our progress report, detailing progress against our three core areas. Since the publication of this report, we have continued to work at pace to deliver our net zero targets.

Overview of our commitments

1 Corporate emissions

We are committed to achieving net zero for our own operations by 2030. This covers energy used to light and power our network, travel by our traffic officers and the energy used in our offices and other travel. We also include the carbon locked up in trees and plants on our motorway verges.

34,812 tCO_2e

Emissions in 2022 NZP

2 Maintenance and construction emissions

We are committed to achieving net zero for our maintenance and construction activities by 2040. This covers the greenhouse gases emitted in making the materials we use to keep our network in good condition, such as cement, steel and asphalt. Our target also includes the transportation of materials and emissions from construction on our sites.

524,734 tCO_2e

Emissions in 2022 NZP

3 Road user emissions

We are committed to achieving net zero carbon travel on our roads by 2050, in line with government's trajectory for net zero road transport. It is a rapid transition, with up to a 55% reduction in emissions by 2030 and up to 90% by 2040. Our plan will enable this transition by providing the infrastructure needed for zero carbon motoring on the SRN.

27.828 $MtCO_2e$

Emissions in 2022 NZP

Our net zero roadmap

Our 2030, 2040 and 2050 targets are the driving force behind our net zero plan. The milestones we have set out will shape our actions and provide an indicator of progress.

	2025	2030	2035	2040	2045	2050
1 Corporate emissions Net zero by 2040	**67%** reduction in emissions compared to 2017–18	**100%** of our corporate emissions are net zero without purchased offsetting				
2 Maintenance and construction emissions Net zero by 2040	**0–10%** reduction in emissions	**40–50%** reduction in emissions	**70–80%** reduction in emissions	**100%** of our schemes are net zero and, where there are residual emissions, these will be offset using robust, certified 'removal' offsets		
3 Road user emissions Net zero by 2050	**31–26 $MtCO_2e$** emissions range parameters	**25–15 $MtCO_2e$** emissions range parameters	**20–7 $MtCO_2e$** emissions range parameters	**8–3 $MtCO_2e$** emissions range parameters	**5–1 $MtCO_2e$** emissions range parameters	**100%** of our network will be net zero

Our 2030, 2040 and 2050 targets are the driving force behind our net zero plan. The milestones we have set out will shape our actions and provide an indicator of progress.

1 Corporate emissions

Key performance summary

Delivering better environmental outcomes

Our targets and ambitions

We have a corporate carbon KPI to reduce carbon emissions resulting from our electricity consumption, fuel use and other day-to-day operational activities during the second road period. This covers Scope 1 and 2 emissions generated from our business activities and Scope 3 from business travel.

In March 2023, we agreed with DfT a change in our KPI reporting methodology to calculate electricity emissions based on the latest (and more carbon intensive) grid decarbonisation factors. This aligns our KPI reporting with Greening Government Commitments.

Our updated target is to achieve a 67% reduction in emissions. This will mean reducing emissions from 90,286 tCO_2e (2017–18) to 30,148 tCO_2e.

The underlying activities required by National Highways to achieve this revised target and the Net Zero Plan remain unchanged and are not impacted by this change in reporting methodology. We also have the commitment to be net zero by 2030, which includes additional Scope 3 activities and follows the Science Based Targets initiative (SBTi).

Our 2022–23 results and performance

In 2022–23, our corporate carbon emissions were 44,809 tCO_2e against the KPI, which fall within the targeted range set for the year. This represents a 6% reduction from last year.

- 99.7% of our electricity is now purchased on certified renewable tariffs.
- Plug-in hybrid electric vehicles or electric vehicles now represent 67% of our light fleet.
- 6 million fewer business miles travelled in 2022–23, compared to pre-pandemic levels of travel.

KPI to reduce carbon emissions by

67%

by the end of 2025

Commitment to be

Net zero

by 2030

We achieved a

6%

reduction in carbon emissions from 2021–22 to 2022–23

and

99.7%

of our electricity is now renewable

Increasing the energy efficiency of our operations sites

We are continuing to increase the energy efficiency of our operations sites and use of low-carbon heating in our buildings. We have installed improved energy-efficient lighting and heating systems across our depots, and we are aiming for BREEAM standard at all new depots.

Our depot at Almondsbury is an example of what we have been able to achieve to upgrade efficiencies at an older site:

- Installation of LED lighting and PIR sensors
- Air source heating and cooling systems
- Photovoltaic panels due to be fitted to the roof, which aim to produce 67MWh electricity to support air source system and electric vehicle charging
- Six electric vehicle charging points, with plans for an additional four

Our depot at Malton is an example of what we have achieved with new-build sites:

- Photovoltaic panels fitted to the roof
- Rainwater harvesting
- Sustainable drainage systems and improvement of the natural habitat
- Electric vehicle charging points
- Low-carbon heating and cooling systems
- Cycle storage and shower facilities

2 Maintenance and construction emissions

Net zero plan commitments and performance indicator

0–10%
by 2025

40–50%
by 2030

70–80%
by 2035

Net zero
by 2040

Baseline:
734,000
tCO2e (2020)

Our performance indicator (PI)

- We have a PI that monitors greenhouse gas emissions from the work we commission, delivered by our supply chain.
- This includes the greenhouse gases emitted during raw material supply and product manufacture as well as transport to site, emissions from the plant and machinery used in road construction and maintenance and waste.

2022–23 achievements

- Our 2022–23 emissions: 524,734 tCO_2e.
- We published our *Low-carbon opportunities register* and carbon reduction roadmaps across concrete, asphalt and steel.

- We produced tailored carbon reduction plan to accompany each of our strategic procurement category strategies.
- We became the world's first roads organisation to achieve the PAS2080:2016 carbon management in Infrastructure standards.

Calculating and monitoring emissions

We continue to update our carbon calculation tool, using the latest lifecycle emissions calculations to monitor supply chain greenhouse gases and assess performance on an annual basis. This year, we launched version 2.5 of the tool.

In December 2022, we published our PAS 2080:2016 carbon management in Infrastructure-accredited carbon management system. A key enabler for our net zero plan, it is also mandated by DfT. The document outlines the process for tracking, managing and reducing carbon emissions associated with our construction and maintenance activities across all stages of the delivery process. To support implementation of our carbon management system, we launched a new element of our Project Control Framework, called the *Carbon management report*, to set out how schemes should assess carbon at each stage of delivery. Our targets for schemes are set out in our guidance for this report. The *Carbon management report* is supported, for example, by standards for climate assessment (LA114: Climate) in our *Design manual for roads and bridges*.

In 2022, we launched our *Low-carbon opportunities register*, which supports our carbon management system. It is a database of low-carbon and carbon reduction opportunities in the design, construction and maintenance of our assets. It includes interventions at various stages of innovation maturity (from research level to market ready), along with information on applicability of these interventions within our current standards. We hope that this tool will be a useful starting point for delivering our decarbonisation targets.

In our A1 Birtley to Coalhouse project, we identified and implemented several carbon reduction opportunities. This 6.5km scheme involves widening the A1 south of Gateshead to provide additional capacity. We used recycled materials, leading to 255tCO_2 in savings. We also used environmentally-friendly concrete mixes, switched to electric on-site vans and installed renewable energy solutions in compounds, which helped result in savings of 700tCO_2. We also have a longer term goal of re-using all materials from the project, including no off-site disposals, which could potentially result in savings of 1,772tCO_2.

3 Road user emissions

Net zero plan commitments

31–26
$MtCO_2e$ by 2025

25–15
$MtCO_2e$ by 2030

20–7
$MtCO_2e$ by 2035

8–3
$MtCO_2e$ by 2050

5–1
$MtCO_2e$ by 2050

Net zero
by 2050

Baseline:
33
$MtCO_2e$ (2020)

2022–23 achievements

- 2022–23 emissions: 27.828 $mtCO_2e$.
- Carbon emissions from vehicles using the SRN show a reduction of 16% on the previous year (32.7$MtCO_2e$ in 2021–22 and 27.8 $MtCO_2e$ in 2022–23), according to data derived from the National Traffic Model.
- Today, a driver is never more than 25 miles away from a rapid charge point anywhere along England's motorways and major A-roads.
- Work has continued with MSA operators at seven sites to implement energy storage solutions to support ultra-rapid or high-power charging at busy times.
- We updated our guidance for statutory consultee responses to planning applications to include net zero carbon considerations.

Reducing emissions from vans and HGVs

Vans using our network produce about 5.5 million tCO2e per year, making them a significant source of emissions. Faster progress on electric van uptake is also highlighted as a key priority by the UK's independent Climate Change Committee.

In 2022, we extended our electric van trial programme to Coventry and Bristol. We also carried out detailed monitoring of our existing trials in Leeds, Kent, Nottingham and Sheffield. Funded by our designated funds, these trials are delivered in partnership with cities or local authorities, who then run the schemes on a day-to-day basis. Through these trials, local businesses typically trial an electric van for two months for free to understand the potential benefits of switching to a zero-emission fleet. These include improved fuel efficiency, greenhouse gas emissions and local air quality.

Around 33% of emissions from our network currently come from HGVs. In 2022, we contributed significantly to DfT-led Innovate UK zero emission road freight trials. Our contribution included a feasibility study into the potential for an electric road system demonstrator and research into a preferred investment plan for HGV charging/zero emission HGVs by 2028.

We also conducted HelmUK, the first real-world trial of HGV platooning. This uses advanced driver assistance systems to enable HGVs to safely travel close together, typically 0.5 to 1.0 seconds apart. As a key partner in the project, we used on-road trials to investigate whether platooning could safely provide more effective use of our network, reducing the need to build additional roads and improving fuel efficiency. Following conclusion of the trials, the final report detailing the outcomes was published in July 2022 (TRL Helm UK Report 2022).

Air quality

We want to do all we can to look after the wellbeing of everyone who uses our roads and those who live or work near them. This includes making a difference when it comes to air quality.

Why this topic is material to us

Emissions from vehicles using our roads, particularly nitrogen dioxide (NO_2), can pose a risk to people's health and wellbeing. We are committed to doing our part to help manage and resolve areas of poor air quality that affect local communities and ecological sites as well as supporting the shift to zero tailpipe emission vehicles. Our understanding of the impact, and the steps we can take to manage the consequences, is underpinned by our extensive air quality research programme, which has been ongoing for the last decade.

We have legal obligations to help deliver government's *Air quality plan for nitrogen dioxide* and to pay due regard to the emerging *Air quality strategy*. We know that improving air quality for the long term is a collaborative effort between all levels of government, and that there are limitations on what we can do alone. There is still much to do to achieve legal limits for NO_2 in the shortest timescale possible, and to support government to meet the newly introduced lower targets for PM2.5.

"We need to do our part to help manage and resolve areas of poor air quality that affect local communities and ecological sites."

Key performance summary

Delivering better environmental outcomes

Our targets and ambitions

We have an air quality KPI for the second road period. With this KPI, we have committed to bringing agreed sections of the SRN into compliance with legal NO_2 limit values in the shortest possible time.

We have continued to work on those areas of our network identified as potentially not complying with the annual mean NO_2 limit value of 40μg/m³, including additional modelling and assessment for new links that were included in commission from DfT. We deployed new air quality monitoring over summer 2022, alongside 56 sections of our network where we have a modelled exceedance or are very close to the limit value.

At the end of 2022, we published our first annual evaluation report, which provided an updated status for each of the 129 sections of the SRN that we have been asked to look at. Our performance has been significantly impacted by the Covid-19 lockdown restrictions in 2020 and 2021. These restrictions led to significantly reduced traffic flows, primarily in 2020, and changed journey patterns during both years. In turn, this led to much lower measured annual mean NO_2 concentrations, compared to pre-pandemic conditions.

Overall, this meant that we were not able to use traffic and air quality data collected during 2020 and 2021 as it was not representative of pre-pandemic conditions. Any reductions seen in pollutant concentrations throughout 2020 and 2021 are likely to increase again as traffic returns to pre-pandemic levels. Monitoring data collected throughout 2022 will provide a more realistic picture of air quality following the pandemic.

Our 2022–23 results and performance

- Secured £11 million funding to implement our new flagship air quality policy and promote the quicker uptake of electric vans for regular users of the A3 in Guildford (scheme scheduled to launch in Sept 2023)
- Delivered a new 60mph speed limit trial on the M4 junctions 3 to 4 in response to ongoing air quality exceedances; we now have five sections of our network with 60mph speed limits for air quality reasons
- Continued to explore options to help improve air quality alongside parts of the A3
- Identified a potential site to relocate the Thurrock pick-up point for cyclists (A282) and progressed the detailed design for a new cycle shelter
- Started a research project to test how effective roadside filtration technologies could be to help reduce NO2 concentrations; this project will continue into 2023–24
- Progressed a series of research projects investigating the impact of poor air quality on ecosystems alongside our network and potential approaches to help limit or mitigate the impact of air pollution
- Worked closely with Natural England to better evaluate the impacts of changes in air quality brought about by new schemes
- Awarded an £8 million contract to design, build and commission energy storage systems, typically 2MWh capacity, at seven priority motorway service areas by the end of 2023

£11 million

funding secured to implement our new flagship air quality policy to incentivise the quicker uptake of electric vans

£8 million

contract awarded to design, build and commission energy storage systems

60 mph

speed limit trial delivered on the M4 junctions 3 to 4 in response to ongoing air quality exceedances

Air quality: links confirmed as in exceedance at 31 March 2023
(Those where the average concentration of NO_2 exceeds $40 \mu g/m^3$ in a calendar year)

Links with measures to be undertaken by us, including feasibility studies and existing measures (28)

PCM Census ID	Commission no.	Road name	Road description
17736	1	A3	A3/A25 junction to Wilderness Road
89052[1]	3	A282	A1306/A282 junction to London Road crossing
81374	1	A38	A38/A374 junction to A38/B3414 junction
56033	1	M32	Junctions 1 to 3
70230	1	M6	Junctions 6 to 7
99614	1	M60	Junctions 20 to 21
46015	1	M5	Junctions 1 to 2
6013	1	M4	Crossing of High Street to M4 junction 4
36007	1	M1	Junctions 33 to 34
57783	1	A500	A500/A50 to A500 crossing of Whieldon Road
77743	2	A69	Tyneside
28015	1	M602	Junction 2 to junction 3
8340	1	A500	A500 crossing of Whieldon Road to A500 crossing of Shelton Old Road
16050	1	M602	Junctions 1 to 3
56007	1	M621	Junctions 6 to 7
48086	3	A3	Guildford: A3/A25 junction to Woking Road
86048	3	A282	Dartford: junction 1a to junction 1b
6053	3	M60	Bury: junction 17 to junction 18
7701	3	A5103	Manchester: junction 3a (M56) to junction 5 (M60)
16056	3	M60	Trafford: junction 9 to junction 10

27854	3	M67	Tameside: junction 1 (M67) to junction 24 (M60)
38661	3	M60	Trafford: junction 9 to junction 8
17377	3	A663	Oldham: Broadway from A669 to junction 1 (A627(M))
48011	3	M60	Stockport: junction 27 to junction 1
73379	3	A628	Tameside: Market Street/Woolley Lane junction to the Tameside/High Peak Local Authority boundaries
73909	3	M1	Sheffield: junction 34 south to the Sheffield/Rotherham Local Authority boundaries
26575	3	A57	Tameside: A6018 to Market Street/Woolley Lane
46583	3	A57	Tameside: A57 Hyde Road to A6018

Links confirmed with no viable measure for us (15)

PCM Census ID	Commission no.	Road name	Road description
77436	1	A34	A34 northbound exit/entry Godstow Road to approx. 1.5m south of the junction
57767	1	A38	Kedleston Road/A38 junction to A38/A5111 junction
28076	1	A316	M3 junction 1 to end of lay-by
47892	1	M4	Junction 1 to crossing of Boston Manor Road
99337	1	A50	Meir Tunnel to A50 junction with Lysander Road
89200[2]	3	A1	Crossing of Dunston Road to A1/A184 junction
99329	1	A50	A50/A500 to Trentham Lakes junction
74768	1	M32	Junctions 2 to 3
99335	1	A50	A50 crossing of Alhambra interchange to Meir Tunnel
26012	1	M4	Crossing of Boston Manor Road to Heston Services
75422	1	A50	Within A50 Lightwood Road junction

99331	1	A50	Foley Road interchange to Heron Cross interchange
27932	1	A63	A63/A1165 junction to Mytongate roundabout
48331	1	A63	Mytongate roundabout to Castle Street/Clive Sullivan Way interchange
74456	1	A38	A38/A516 junction to A5111 slip roads

Notes:

1 Reporting uses replacement commission 3 number rather than commission 1 census ID 80846

2 Reporting uses replacement commission 3 number rather than commission 1 census ID 80427

Biodiversity

We are committed to protecting the natural environment that surrounds our roads. Biodiversity remains a key focus as we support government to achieve their long-term targets, as set out in *A green future: our 25-year plan to improve the environment.*

Why this topic is material to us

As stated in our *Biodiversity plan*:

"Biodiversity is the variety of all life on Earth. It includes all species of animals and plants, and the natural systems that support them. This diversity of life matters in its own right, but it also matters because it supports the vital benefits we all get from the natural environment. It contributes to the economy, health and wellbeing. It enriches our lives.

"Our network contains a range of protected habitats, including species-rich grasslands, woodlands and wetlands. It also supports and impacts on a number of rare and protected animals and plants, including barn owls, peregrine falcons, dormice, rare orchids and other wild plants.

"In their most recent analysis, Natural England identified that over 40% of our most important habitats and 30% of our rarest species were still declining. This is despite recognition of the problem and conservation efforts over decades."

We know that roads have contributed to declining biodiversity, and we are proactively identifying ways to avoid, reduce or minimise our impact. We are also looking for opportunities to create new habitats and restore or improve biodiversity.

Key performance summary

Delivering better environmental outcomes

Our targets and ambitions

We have a biodiversity KPI to achieve no net loss of biodiversity at an organisational level by the end of the second road period. We measure performance in biodiversity units, calculated using Natural England's biodiversity metric 2.0.

We have allocated a substantial amount of funding to help us achieve this KPI. This funding also supports projects with wider benefits to natural capital, customers and our neighbouring communities.

In this road period, we are committed to identifying and exploring different approaches to delivering our projects to maximise biodiversity outputs. We also want to capture data and manage our soft estate to improve biodiversity delivery and improve transparency in reporting.

Our 2022–23 results and performance

During 2022–23, we focused on three key areas:

1. How we design and deliver our major schemes

We promoted changes in behaviour to further improve the way we design and deliver our major schemes to avoid and reduce biodiversity loss and improve retained habitats.

While not every project can achieve a positive outcome in isolation, we have now forecast a net positive outcome for our major projects programme of over 1,000 biodiversity units by the end of this road period. This represents a substantial improvement; at the start of the second road period, we had forecast a substantial net loss of biodiversity.

Our KPI is an organisational-level target, which includes all activities of our Major Projects and Operations directorates. The positive contribution from our major projects goes a long way to helping us to achieve our KPI by March 2025.

2. Our operational estate

In the second road period, we have assumed that we will lose 1% of the biodiversity value of our estate annually because of historic management practices. We are gathering evidence to support us moving away from this assumption and have identified methods to improve how we deliver our routine maintenance schemes to minimise biodiversity losses and enhance assets, where practicable. This includes using practices which promote improved diversity of grasslands and undertaking sympathetic woodland thinning, giving native trees the opportunity to prosper.

3. Strategic programmes of work

We continue to work on programmes of work with stakeholders such as the Wildlife Trusts, National Trust, RSPB and Plantlife. In the second road period, we want to improve collaboration with these organisations and other third parties, and develop a suitable delivery model for working together in the future.

Our work this year with partners has focused on:

- delivering programmes that target improvements to habitats and species
- promoting landscape-scale connectivity
- developing legal agreements and management/monitoring plans to ensure habitats are looked after in the long term
- improving the economic case for investment in nature, focusing on cost-effective delivery of habitats and looking for opportunities to deliver benefits to communities, landscape value, water quality, flood reduction and carbon sequestration where possible

Flooding and water quality

We recognise that both flooding and water quality have an impact on road users, neighbouring communities and the wider environment.

Why this topic is material to us

Parts of our network are vulnerable to flooding. Emissions from vehicles can also contribute to water pollution through road runoff.

Water environment

We have two performance indicators (PIs) for the water environment:

1. Our water quality PI reports the length of watercourses improved through the treatment of polluting discharges to surface and groundwater bodies and other interventions, for example river retraining, the removal of barriers or the provision of fish passes to aid migratory fish and eel populations.
2. Our drainage resilience PI reports the percentage length of carriageway that does not have an observed significant risk to flooding, and is supported through interventions across our network that address locations susceptible to repeated flooding.

Key projects and progress

In 2022–23, we:

- delivered five water quality initiatives, improving 6.7km of waterbody, including an innovative fish pass on the A38 in Devon
- completed our research with the Environment Agency into microplastic pollution from road run-off, publishing our outputs
- improved flood resilience at 47 locations on our network vulnerable to flooding, including delivering a £7 million flood risk management scheme on the A38 in June 2022, working in partnership with the Environment Agency in the Midlands
- continued to develop a programme of 21 projects with a combined value of £23.5 million, funded through our designated funds and working in collaboration with the Environment Agency

21

programmes in development with a combined value of

£23.5 m

Helping improve flooding and water quality:

Improved

6.7km

of waterbody through **five** initiatives

Improved flood resilience at

47

locations on our network

Delivered a

£7 million

flood risk management scheme on the A38 in June 2022, working in partnership with the Environment Agency in the Midlands

TCFD statement

Responding to the Taskforce on Climate-related Financial Disclosures (TCFD)

The G7's Financial Stability Board created the TCFD to improve and increase reporting of climate-related financial information. The TCFD developed recommendations on disclosures across four pillars to help organisations systematically assess and disclose their handling of climate-related financial risks. In 2023, we are due to publish our first TCFD report, in which we have created a baseline for our alignment and showed that addressing the physical and transition risks of climate change are central to our operating model.

TCFD pillar: Governance

Recommended disclosure

- Describe the Board's oversight of climate-related risks and opportunities
- Describe management's role in assessing and managing risks and opportunities

Overview of our actions	Further details in this *Annual report*
• The Board is accountable to our Shareholder, DfT, for all aspects of our company performance. • Several strategic, financial or significant matters, including setting **environmental direction, policy and performance standards**, are reserved for approval by the Board. • We worked closely with the Board in developing *Net zero highways: our 2030, 2040 and 2050 plan*, which the Board subsequently approved. We published this report in 2021. • We followed a similar process for our wider *Environmental sustainability strategy*, which includes plans and ambitions for tackling climate-related matters. This strategy was published after year-end, in May 2023.	• For the role and accountabilities of the Board, see pages 205 and 206 • For 2022–23 updates on *Net zero highways*, see pages 94 to 102

Overview of our actions	Further details in this *Annual report*
• The **Board** receives quarterly updates on the progress made to manage our corporate level risks. • The **Audit and Risk Committee** ensure our organisation has efficient and effective risk management, internal control and governance arrangements, and they oversee these on behalf of the Board. This includes risks and controls relevant to climate resilience.	• For the role of the Audit and Risk Committee, see page 246 • For the role of our Executive, see page 238 • For updates from our carbon team, see pages 27 and 94
• Our **Executive team**, reporting to the Board, is the main overseer of climate-related risks. ‘Environment and sustainability’ is a key transformation theme, delivered through the Environmental Sustainability division. • Our **Carbon Net Zero Steering Group** oversees climate-related risk management. Annual progress against our *Net zero highways plan* is presented to this group, prior to discussion with our Executive. • The **Central Carbon Team** reports to the Carbon Net Zero Steering Group. They present papers to our Executive team on climate matters, ranging from climate risk and impacts to net zero and TCFD.	

TCFD pillar: Strategy

Recommended disclosure

- Describe the climate-related risks and opportunities identified over the short, medium and long term
- Describe the impact of climate-related risks and opportunities on businesses, strategy and financial planning
- Describe the resilience of strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

Overview of our actions	Further details in this *Annual report*
• In 2022, we published **two key climate-related reports** setting out risks and opportunities: 1. *Preparing for climate change on the SRN*, part of our submission to Defra for our third Adaptation Reporting Power (ARP3) 2. *Climate change and the SRN* • Our adaptation position, including our work under ARP3 and input to wider government work such as National Adaptation Programme reporting, was presented to our Executive and the Board. It is now incorporated into our asset management transformation commitments.	
• To help us understand the risks and opportunities presented by climate change, we undertook a **climate scenario analysis** based on UK climate projections. We conducted a gap analysis against the TCFD requirements to identify a range of steps for the remainder of the current road period (2020–2025) and the next (2025–2030).	
• We conducted a **physical climate change risk assessment (CCRA)**, covering our key asset classes. This examined the projected change for a variety of climate hazards. We considered acute, event-driven risks, such as the increase in severity of extreme weather, as well as chronic, longer-term risks relating to shifts in climate and weather patterns. • For risk and impact descriptions, see *Preparing for climate change on the SRN*. In this document, we also detail actions to address each of the priority risks and build adaptative capacity.	

Overview of our actions	Further details in this *Annual report*
• Tackling the causes of climate change requires a transition to a low-carbon economy, which creates **transition risks**. We have grouped these into four categories (policy and legal; reputational; market; and technology) and incorporated them into our strategic thinking. More details can be found in our full TCFD report.	
• Following the ARP3, we are creating an **adaptation roadmap**. This further develops the high-level actions in ARP3 and maps them against the UK CCRA. Each action has a clear pathway, with timescales, an owner and funding implications.	
• While we are delivering our *Delivery plan 2020–2025*, we are also working with government to **plan for the third road period**. Climate-related risks and opportunities form part of the conversation as we work to develop our approach, goals and funding for 2025–30.	

TCFD pillar: Risk management

Recommended disclosure

- Describe the processes for identifying and assessing climate-related risks
- Describe the processes for managing climate-related risks
- Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management

Overview of our actions	Further details in this *Annual report*
• Our **risk management process** focuses on early identification, assessment and management of risk. • Delivering better environmental outcomes is an integral part of our risk appetite. Environment is a core element of our risk assessment process, and all risks are evaluated against a set of environmental impact and likelihood statements. • All risk aligns to our strategic outcomes, and the Board and our Executive team work together to identify, review and monitor these throughout the year. Our people are encouraged to identify, prioritise, manage, monitor and report all risks relevant to their working area.	• For our risk assessment and management processes, see pages 178 to 183
• We currently recognise **13 principal risks** that encompass all key areas of our business. • Our principal environment risk focuses on failing to meet government targets. We also recognise that, as risks are interlinked, several other principal risks would be heightened in the case of climate-related impacts. These include, for example, asset failure. • Secondary environment risks, including climate-related risks, sit within directorate, project and programme risk registers. These are owned and managed by the relevant part of the business.	• For our principal risks, see pages 184 to 199
• We **regularly monitor the environmental regulatory landscape** and record our compliance in our Legal Register.	

Overview of our actions	Further details in this *Annual report*
• We undertake additional horizon scanning activities, including through our *Net zero highways plan* and the wider road investment planning process. • We are committed to the Science Based Targets initiative (SBTi), which sets and promotes best practice in reducing companies' emissions and setting net zero targets in line with climate science.	

TCFD pillar: Metrics and targets

Recommended disclosure

- Disclose the metrics used to assess climate-related risks and opportunities in line with the company's strategy and risk management process
- Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks
- Describe the targets to manage climate-related risks and opportunities and performance against targets

Overview of our actions	Further details in this *Annual report*
• Our **performance framework** sets out seven principal outcomes for the second road period. It also contains performance metrics so our progress can be monitored by DfT and the ORR. • Two of the seven principal outcomes relate to climate change: 1. Delivering better environmental outcomes 2. A well-maintained and resilient network • For associated metrics, see the performance framework, published in our *Delivery plan for 2020–25*.	• For 2022–23 updates on *Net zero highways*, see pages 94 to 102
• In *Net zero highways*, we set out a series of **2030, 2040 and 2050 commitments**. Each action has its own risks, metrics and interim targets, and is owned at management level and sponsored by an Executive team member. • In *Net zero highways*, we also set out commitments for **Scope 1, 2, and 3 emissions** across corporate, maintenance and construction and road user emissions. Updates follow widely recognised standards and are based on a 2020 baseline. • We aligned *Net zero highways* to support the UK's decarbonisation pathway. We have also aligned with: **1.5°C reduction goal of the Paris Agreement**; government's *Decarbonising transport: a better, greener Britain* (2021) and *Industrial decarbonisation strategy* (2021); and government's sixth carbon budget.	• For 2022–23 updates on progress, see page 97

Overview of our actions	Further details in this *Annual report*
• We have targets across schemes to reduce energy and use renewable or low-carbon energy sources. • We also assess scheme performance against national carbon targets in the *Design manual for roads and bridges*, and report to our Net Zero Steering Group as well as in the *Annual report and accounts*. • As part of our **PAS2080 accredited carbon management system**, we collect scheme information in a carbon management report across our project life cycle, from options identification to close out. We produce post-opening project evaluation reports one year after the opening of a road scheme and again at five years. These reports evaluate whether the enhancement scheme met its scheme-specific objectives, including those relating to the environment.	

The strategic report was approved by the Board on 13 July 2023 and signed on its behalf by:

[Signature]

Nick Harris, Chief Executive

Caring about people

In this section

Our customers

Elliot Shaw,
Chief Customer and Strategy Officer

"We want to make a difference for our customers, which means focusing on what is important to them. We are responding to the evolving needs, wants and expectations of our customers to deliver improvements now and create a positive legacy for the future."

Our *Customer service strategy* and annual *Customer service plan*

Our *Customer service strategy*, published in May 2021, sets out our vision for delivering great customer experiences and outlines how we will do this, based on the needs and wants of our customers.

We are building capability to help us improve how we deliver the basics, operate a well-maintained and safe network and provide better information for our customers. Ultimately, we want to enable stress-free journeys that meet and exceed our customers' expectations.

We publish an annual *Customer service plan*, with the 2022–23 plan published here. Our plan is based on customer insight, making sure that the feelings and experiences of those affected by our work shape the things we do.

We want to make a difference for our customers, which means focusing on what is important to them. We are responding to the evolving needs, wants and expectations of our customers to deliver improvements now and create a positive legacy for the future.

We run a customer maturity survey with our people to understand what they see, think and feel in this area. The survey outcomes allow us to identify areas of strength and growth for our business. This year, we developed a business area-specific guide to support our people in becoming more mature in their customer offering. The guide was developed through collaboration across our business and will help connect our people to the contribution they make in delivering a greater customer experience.

Customer service strategy

Our approach is based on customer insight and our performance goals for the second road period. We work across six customer themes in parallel. For more detail about our vision and aspirations for each of these themes, please read our

Customer service strategy: Making a difference for our customers in full here.

[Diagram]

Gathering customer insights

Key performance summary

Meeting the needs of all users

Our targets and ambitions

At the start of the second road period, our KPI was to achieve an 82% road user satisfaction score for the first two years, with a year-on-year increase in the following three years. However this KPI is currently suspended, as explained below.

Our formal way of measuring road users' satisfaction on our network is through the Strategic Roads User Survey (SRUS). This is led by Britain's independent watchdog for transport users, Transport Focus. The SRUS measures our customers' experiences of a recent journey driving on our motorways and major A-roads.

The survey was paused in 2020–21 due to Covid-19 restrictions, meaning face-to-face surveys were not possible. We have worked with Transport Focus on an alternative method of data collection: *Strategic Roads User Survey Online*.

Using this approach, customers who would have been visited at home are posted a link to the survey to complete online. This has led to changes in response rates, respondent profiles and responses. Traditionally online surveys have lower satisfaction scores than face-to-face surveys. It also takes time to understand the impact of any changes in approach.

Our 2022–23 results and performance

Our road user satisfaction KPI was suspended in 2020–21 and remains suspended for 2022–23. The survey has still been running, however, in spite of the suspension of formal targets, to ensure we still have insight to customer sentiment.

Our overall satisfaction score for the year-to-date rolling average is 73%, based on 8,971 responses. In 2021–2022, the 12-month rolling overall satisfaction score was 69%, based on nearly 5,200 responses.

Our SRUS target will be re-established as our KPI now that we have more data on the new online format. DfT and ORR have approved a target for 2023–24 of 73.0%.

Our rolling average satisfaction score for the year is

73%

Customer insight tools

To ensure that we are responding to what is most important to our customers, we are continuing to use insight tools and wider research. This includes quantitative surveys that complement the SRUS and gather more detailed and varied information on journey experiences.

HighView, our monthly online quantitative survey, captures the experiences of those who have used our network as a driver or passenger in any motorised vehicle in the last four weeks. The survey is made up of over 20,000 responses per year split across each of our regions.

In 2022–2023, we developed and reviewed our Customer Experience Tracker, which replaces HighView from April 2023. Like HighView, it is an online survey. It has a monthly sample size of nearly 2,500, of which approximately 1,750 respondents will have made a journey on the network in the last four weeks of answering the survey. It is also specifically designed to track performance over time.

In addition to ongoing analysis and monitoring, we undertake annual analysis of our quantitative surveys to understand what drives our customers' ratings. In 2022–23, these ratings stayed largely consistent with previous years. The findings from HighView showed that, if our customers felt in control of their journeys, they would be happy with their overall journey experience – essentially experiencing a stress-free journey, feeling safe and trusting in the accuracy and visibility of our signs.

We use key driver analysis to prioritise activities within our annual *Customer service plan*, helping us deliver the improvements which are most important to our customers.

Customer Panel

During 2022–23, we used our Customer Panel to gather more in-depth qualitative insights and bespoke quantitative insights. This covered, for example, understanding more about customers' habits, attitudes and knowledge surrounding tyre purchasing. We explored customers' understanding and responses to campaign materials to ensure they remain effective. We also continued to engage with wider customer groups with cognitive impairments to better identify their service needs.

Social and behavioural research programme

We have ongoing programmes of social and behavioural research that allow us to dig deep to understand the experiences, beliefs and behaviours of our customers. We use the findings to influence decision-making and improve outcomes for our customers.

In 2022–23, for example, we identified how we could build and maintain trust among our customers, whether as users, communities or citizens. We also identified how organisations could reduce work-related road risk among their people and how our customers think about environmental sustainability and their expectations for the future of our network. In addition, we explored how the cost of living crisis is impacting our customers.

We also use behavioural science to improve direct communications with our customers, for example improving the letters sent to those eligible for our noise insulation scheme.

"Understanding the customer's perspective, what they think, feel and do, is essential to meeting their needs now and in the future."

20,000

responses per year to our HighView online quantitative survey, split across our six regions

2,500 average monthly sample size of our online Customer Experience Tracker

Our rolling average satisfaction score for the year is

Understanding views of logistics and coach providers

Transport Focus' Logistics and Coach Survey measures how satisfied businesses that run lorries and coaches are with our roads, helping us understand what they want to see improved.

In 2022–23, we held the first Bus and Coach Forum, engaging with major operators to understand how to improve customer experience for both operators and passengers and enable seamless end-to-end travel. In 2023, this forum will help input to, and shape, a bus and coach programme to support the sector and its passengers.

Improving healthy trips to schools

In 2022–23, we worked in the Yorkshire, Humber and North East regions in collaboration with Living Streets to review the possibilities for healthy travel to schools from the SRN. We selected 15 schools and, following an audit, a range of measures will be made to support healthy trips on foot or by bike to school. These will range from implementing safe cycling and walking equipment to making recommendations for infrastructure improvements.

Learning from walkers, cyclists and horse riders

In 2022–23, we reported on the results of customer satisfaction surveys from five cycling and safety schemes delivered in the first road period.

A total of 500 surveys responses were gathered from walkers, cyclists and horse-riders, giving us insight into a range of areas, including safety, satisfaction, route quality and connectivity.

Across all five locations, there was 91% satisfaction with what we have delivered. Users appreciated and preferred tranquil and calm routes away from road traffic. This result shows how our work positively impacts end-to-end journeys and customer experience. We are using these findings to shape future delivery of active travel schemes to help us meet customer expectations.

A total of

500

survey responses were gathered from walkers, cyclists and horse riders, giving us insight into a range of areas, including safety, satisfaction, route quality and connectivity.

There was

91%

satisfaction across all five locations, with what we have delivered.

Using insight to deliver improvements to lorry parking

Through our Professional Driver Experience Panel, we engage with professional drivers to understand what matters to them most. The knowledge we have gathered has complemented other sources of insight, including from Transport Focus, and has helped us develop a lorry parking improvements scheme. We have allocated £20 million from our Users and communities designated fund to invest in improving freight facilities, in collaboration with the sector. We expect to deliver projects across our network throughout the remainder of the second road period.

Gathering customer views

Our in-journey customer audit programme, led by our customers and for our customers, is an important insight-gathering tool. We ask our customers to report on what they saw, thought, felt and did when driving through our roadworks, gathering both written and digital evidence.

Over the past year, we used this programme to identify areas that impact overall customer experience and safety. We subsequently developed interventions that have improved how we plan, operate, maintain and improve our schemes.

Read more about how we use our in-journey customer audit programme to improve customer experience on page 129

Improving customer experience

We want everyone who uses our roads to get to their destinations safely, and in the time they expect.

Reducing impact of roadworks on the driving public and communities

In May 2022, we rolled out guidance to our project teams outlining an alternative approach to road closures: block closures. A block closure is where the road is closed for longer than a weekend and used instead of more regular shorter closures. By considering block closures as an alternative approach to shorter road closures, we can reduce the disruption and the impact on our customers over the longer term, while generating possible cost savings and efficiencies.

In November 2022, we launched the right sign, right place decluttering guidance for our project teams, which uses best practice insight to provide better information for our customers when travelling through our roadworks. This focuses on providing the right type of information, in the right place and at the right time for our customers.

In February 2023, following successful trials, we issued guidance on implementing Progress-O-Meter billboards on our projects. These aim to improve customer satisfaction through roadworks by displaying up-to-date roadwork progress and providing customers with confidence that the advertised roadwork completion dates will be met.

As all this guidance is new, we will review it regularly to capture best practice and case studies.

We continued to trial electronic boards for roadworks. These are information boards that display messages at the roadside to inform our customers what we are doing throughout the delivery of the works. The messages are updated to reflect the work taking place.

“In November 2022, we launched the right sign, right place decluttering guidance for our project teams, which uses best practice insight to provide better information for our customers when travelling through our roadworks.”

Our in-journey customer audit programme

4,000+

audits successfully completed by our customers

Our customer service teams subsequently worked closely with project teams and delivery partners to communicate and address the issues identified through this customer feedback and insight.

Positive performance trends

for safety in 2022–23

We targeted specific areas identified through the programme that have negatively impacted feelings of safety though roadworks. On our A585 Windy Harbour scheme, for example, we widened traffic cones to help customers feel safer and more in control. On our M6 junctions 21a to 26 scheme, we installed a temporary barrier to help customers feel safer.

Trial success

for customer-focused signs on M6 scheme

We trialled a new series of signs on our M6 junctions 21a to 26 scheme. Evidence suggests that customer experience is negatively impacted where there are long stretches of roadworks without people visibly working on the road. Our new signs featured less technical information, instead communicating simply and clearly about why our people might not be seen. Customer feedback showed that the signs were clear even when travelling at speed. Additionally, customers felt that we cared about their experience.

95%

roadworks customer audit rolling score 2022–23

By identifying and targeting specific issues raised by customers on the programme, we have seen year-on-year incremental improvements in our roadworks management performance. This has resulted in us achieving our 95% corporate customer target for 2022–23.

Litter

We have a performance indicator for litter on our network.

In 2022–23, National Highways surveyed the SRN and reported that 53.6% of the applicable network was rated at Grade A or B according to DEFRA's litter code of practice. This was a decrease in performance compared to 60.8% of the network in 2021–22.

Whilst we recognise that a reduction in performance is disappointing, safety is paramount when clearing litter from our network and can require traffic management and road closures which can be disruptive to our road users, so there is a fine balance to be struck. Litter clearance on most of the A-roads within the network is the responsibility of Local Authorities, and we work to coordinate clearance with other maintenance activity as much as possible. We will continue to do this going forward to improve performance where possible.

However we have continued to deliver against our commitment to help tackle litter on and around our network through a variety of activities, including our company participation in the Great British Spring Clean for the eighth year running. This year, we picked over 4,000 bags of litter, and used variable message signs to support the campaign, displaying 'Bin your litter, other people do'.

In 2022–23, we also started a number of targeted trials to address problems with litter. One such trial used spatial analysis of data to understand the hotspots for littering and sent targeted anti-littering messages to mobile devices around 29 laybys in the area. We have also used artificial intelligence-enabled cameras to identify offences and capture evidence to facilitate fixed penalty notices being issued to offenders.

This year, we picked over

4,000

bags of litter, and used variable message signs to support the campaign, displaying 'Bin your litter, other people do'.

We sent:

29

targeted anti-littering messages to mobile devices around 29 laybys in the area

Handling incidents from a customer's perspective

Following a review of how we handle incidents from a customer's perspective, in April 2022 we launched a new customer-focused debriefing and monitoring process. Effective debriefing enables best practice in incident management to be identified and shared, resulting in less interrupted journeys for customers.

In this new process, we have to write a customer impact brief, explaining what actions were taken to better inform customers. Importantly, we have also brought the voice of the customer into the process, incorporating calls received into our contact centre and posts on our social media channels.

Customer comment:
"I felt as though the management of the roadworks cared about my wellbeing when I saw these signs. I felt as though National Highways was really trying to reduce irritation by explaining that work was being carried out and that I just couldn't see it during the daytime."

Communicating through our variable signs and signals

Our variable signs and signals continue to be effectively used. In summer 2022, we supported efforts to manage the national emergency declared due to extreme heat. We proactively displayed signs for Operation Brock and strategically displayed messages across the network, giving advance warning of the forecast extreme hot temperatures and the need to carry water.

In response to customers telling us they needed more information on our travel time signs, we have added place names. We have doubled the number of place names used on our variable message signs from 22 to 46, focusing on the most popular strategic destinations.

Using our engagement van to reach people far and wide

In 2018, we introduced a mobile visitor centre, known as our engagement van, for major projects delivered through our Regional Investment Programme. We use the van to communicate key information, consult and gather customer and stakeholder views. With the van, we are able to visit multiple locations and have a wide demographic reach.

Today, the engagement van remains an effective tool used by project teams across our company and the country. In 2022–23, we had a total of 8,244 visitors to the van. We drive it to our customers, rather than expecting them to make an additional journey to view our information, for example visiting retail parks, town centres, festivals and major events. Over two days in

November 2022, we had conversations with over 600 customers at an information event in Cheltenham for our A417 Missing Link scheme.

Engagement van highlights:

8,244

visitors in 2022–23

600

customer conversations at an event in Cheltenham

390

customers visited our engagement van events over five days for the M60 junction 18 consultation at various locations

Reducing anticipated delay and congestion during renewal schemes

In 2022–23, we introduced the travel demand toolkit to our concrete roads programme colleagues. We demonstrated how a range of measures to improve customer travel choice and experience during temporary congestion related to scheme delivery and longer-term recurrent congestion.

We worked in partnership with the Concrete Road Renewals Schemes in the East Region on the A14, A12 and A11 to identify how improved communications mechanisms set out in the toolkit could help users plan, prepare, and avoid and reduce the impact of delay. Freight customers were advised on diversion routes and avoiding unsuitable local roads. Public information events advised on re-timing journeys to avoid peak time travel where possible, considering re-moding to alternative modes and re-routing via personalised route planning to and from home.

Continually improving diversion routes

Diversion routes: a customer view was published in May 2022. It outlines best practice principles, including the need for clear and helpful signage, to understand the local impact of the diversion route and to ensure customers and stakeholders are well informed. Following these principles helps provide our customers with a positive diversion route experience. The document has been launched across all our major delivery programmes.

The trial on the M6 junctions 21a to 26 scheme is continuing and in December 2022 we deployed innovative prism signs. This involved replacing the traditional A-frame signs with 25 electronic prism signs along the diversion route between junctions 22 and 23. It is the first time these signs have been used on a diversion route and will be easier for customers to see and follow. We will be monitoring traffic data, customer insight and roadworker feedback over the coming months.

Customer journey maps

To help us understand what it's like to be a customer of National Highways and identify opportunities to improve, we have developed a series of customer journey maps. These focus on our freight and electric vehicle customers, and those customers that contacted us.

Customer journey maps provide us with a visually engaging way of depicting the customer experience as they interact with us and our network. We can highlight key improvement opportunities and bring the customer further into our decision-making process.

"The Travel Demand Toolkit is a hub of knowledge and resources for colleagues and our supply chain, related to improving customer travel choice and experience through minimising delay during scheme construction on the SRN, and to influence longer-term travel choice."

Mapping our customers' experiences

We reviewed our previous insight work and gathered new research through interviews and surveys to:

Better understand
how customers feel when they use our services.

Identify and map
customer pain and gain points.

Identify and prioritise
opportunities to improve the customer experience.

Develop a standard approach
to mapping across National Highways and create a learning package to empower our people to map customer experiences themselves.

Develop a plan
for rolling out the mapping methodology and identifying priority customer journeys to map for the future.

Corporate approach to accessibility

We have developed a company-wide approach to delivering more accessible and inclusive experiences to all our customers, focusing on specific needs of disabled customers. We have carried out detailed research, surveyed disabled customers and interviewed partner organisations to understand how we can make our roads and services more accessible and inclusive. As a result we have created a vision for the future and a roadmap for how we can get there. This focuses on key principles including our own internal culture and capability to improve the services we provide to customers. This will ensure the outcomes of our *Customer service strategy* are felt by all our customers, closing the gap between disabled people and non-disabled people in accessing travel.

To ensure that we were considering all our customers' needs, in 2018 we established a Roads for All Forum, which brings together a wide range of organisations that represent or provide services to disabled road users. We have broadened the membership over the last few years to bring in more expertise and focus and recently welcomed Mencap and Suzi Lamplugh Trust. We work collaboratively with these organisations to ensure we are equal and inclusive in the way we build, improve and operate our roads.

We held our first Roads for All conference in March 2023, which was attended by over 150 delegates. We heard experiences from customers who use British Sign Language and customers with ADHD, which we will use to make improvements to suit the needs of all our customers.

Improving customer communications

We are committed to continually improving how we engage and respond to customer contact, as well as how customers can give us their feedback on our network and our services.

Improving customer contact

In 2022–23, we improved the timeliness of our response to customer contact by 8.1%. As of March 2023, we achieved a 12-month rolling score of 90.8%, compared to 82.7% for April 2021 to March 2022.

The main way we improved in this area last year was from cross-business engagement and collaboration, including:

- rolling out training across the business to empower our people to deliver a professional and friendly service to our customers by telephone, while also supporting a more timely response to customer contact
- identifying learnings in how customer contact progresses through our contact management system and implementing improvements, including the reporting of open calls, to minimise delays where contact requires input from multiple or more relevant team(s)
- developing case templates to help our customer contact centre advisors find out the right information at first point of contact, enabling a more efficient response process
- developing customer contact assurance mechanisms to ensure enquiries and complaints that cannot be answered at first point of contact reach the relevant business area, and to ensure the accuracy of recording customer contact
- developing better and more accessible guidance to provide clear roles and responsibilities for responding to customer contact
- sharing learnings across the business of how correspondence teams are structured to best manage customer contact
- sharing knowledge with the customer contact centre to help advisors answer more customer enquiries at their first point of contact

To find out how to contact us, please see page 373

Improving how we manage complaints

Our performance is improving, and this has been recognised by The Institute of Customer Service. Receiving complaints is, however, unavoidable and, in 2022–23, we worked to further improve how we manage this contact, including by:

- continuing to develop a customer contact platform, which will consolidate all our Customer Relationship Management data onto one platform
- setting up ECHO (Every Customer Has an Opinion) surveys for complaints to help us identify our customers' evolving needs and expectations for responses to their contact and make continual improvements to our procedures and guidance
- using our correspondence forum to share best practice across the business
- attending DfT's complaints forum and cross-government complaint groups to identify improved ways of working
- developing contact handling guidance to provide support to our people and customers when the nature of contact is difficult
- reviewing our corporate complaints process to ensure it remains fit for purpose and aligns to the complaints standards set by the Parliamentary and Health Service Ombudsman

Customer complaints

Stage 1:	
Complaints received **5,994**	Resolved **5,799**
Stage 2:	
Complaints escalated from stage 1 **195**	Resolved **164**
Stage 3:	
Complaints escalated to the Independent Complaints Assessor **31**	Resolved **31**

Stage 4:

Complaints escalated to the Parliamentary and Health Service Ombudsman	Resolved
0	**0**

Digital for customer

We have listened to our customers and improved the communications we provide through our different channels to support their experiences with us, including:

implementing new web services for the Severn Bridges and Operation Brock which advise when these options are open or closed	**opening a Help Centre** on the website to respond to customers' most required services and information
changing our roadworks closures information to make it much easier for customers and partners to find the information they need; this is now the most visited page on our website	**improving the website homepage** to help people get information more quickly
redeveloping our safe driving web content, which has led to increased engagement of 80% and positive feedback from our customers	**updating our traffic alert designs** for Twitter based on customer feedback; our testing shows that these alerts are now much clearer and have led to increased customer satisfaction with the service
aligning our red amber green messaging for weather with the Met Office to make sure we give clear and consistent information to customers	**opening a 'What's on' service on the website** to improve visibility about when and where we will be attending events and shows so that people can come and see us

Our communities

We define social value as the benefits that we, along with our supply chain, deliver for people, the environment and the economy. We strive to maintain, operate and enhance the SRN, while simultaneously creating positive change through the work we do. Delivering social value as an embedded part of our day-to-day work is a priority across our company.

Users and communities fund

Objective of the fund

As set out in government's RIS2, we have ringfenced funding of £958 million for four designated funds across the second road period. These funds support projects to improve lives, increase accessibility, protect the environment and support the nation's economy.

As part of this, we have a dedicated Users and communities fund. Few journeys start and end on our network. We work to better integrate our network with major and local roads. We also work to integrate with wider transport, with a focus on active travel modes such as walking, cycling and horse riding. More broadly, this fund enables us to meet our customers' expectations around technology and freight movement, while still considering the needs of those who live alongside our roads.

Key 2022–23 achievements

- We invested £25.8 million in around 147 projects aimed at meeting the needs of our customers and the communities who live or work near to our roads.
- We improved the A38 Mowhay Bridge in Plymouth, which provides a key walking and cycling link between communities either side of the A38, so it now has fully accessible and inclusive facilities.
- We invested in a sports facility near Bickenhill in Solihull, which provides health and wellbeing benefits to the local community, including those who use the West Midlands Gaelic Athletic Association grounds. This has left a positive legacy for the local community.
- Through our A30 Saints Trails Cornwall project, we created a cycling and walking network which links Truro with St Agnes, Perranporth and Newquay. This enabled safe journeys for commuters, families and visitors, with 9km of cycleway and five new crossings between Redruth and Newquay.

We invested

25.8 million

in around

147 projects

aimed at meeting the needs of customers and communities

We delivered

9km

of cycleway and

5

new crossings to enable safe journeys for cyclists and families between Redruth and Newquay

Developing our social value framework

We have developed our social value framework, emphasising the range of benefits we aim to deliver. Our framework is underpinned by four themes:

1 Economic prosperity

Creating direct economic growth through our supply chain, improving productivity and increasing employment opportunities to support prosperity within each region.

2 Improving the environment

Working towards net zero, improving and maintaining ecosystems and biodiversity, reducing overall levels of emissions and reducing waste to improve the landscapes we impact.

3 Community wellbeing

Improving community wellbeing, education and heritage programmes and increasing healthier living and connectivity to create a positive legacy.

4 Equality, diversity and inclusion

Increasing opportunities for all, creating a more equal society and providing an inclusive and accessible SRN to enable upskilling and transferable skills for the future.

Pavement Delivery Framework

We announced the award of our Pavement Delivery Framework in December 2022. The contracts, worth a total of £1.3 billion, will cover the supply of materials, plant and labour to carry out road surfacing ('pavement') and construction works. The award, which represents the third iteration of our Pavement Delivery Framework, is split across nine lots, with a total of 12 suppliers appointed across the framework. The summaries below provide an insight into some of the social value commitments made by our suppliers for the framework contract:

1. Economic prosperity

£145,000
donated to economic causes

81
apprenticeship opportunities

20 days
work placements supported for 10 people

2. Equality, diversity and inclusion (EDI)

29
diversity initiatives

23
diverse employment opportunities and programmes

3
EDI champions trained

10
work placements for people from disadvantaged backgrounds

3. Community wellbeing

5,400+
hours of volunteering

£225,000
donated to charitable causes

4. Improving the environment

£5,000
donated to environmental causes

2
environmental management plans created

Our social value objectives
This is what we said we would do in 2022:

Approve a social value definition and establish a framework
Launch *Our social value plan: 2022–2024* internally and externally to ensure consistency
Implement a base set of supply chain metrics
Capture supplier contributions in the social value reporting tool
Establish social value governance: steering group, cross-department working group and supply chain focus group
Review and update our project and operational processes
Trial a social value fund to support small community benefit projects

This is what we delivered:

Agreed a definition and developed our framework
Launched *Our social value plan: 2022–2024* in October 2022 and held internal and external webinars in November 2022
Agreed a base set of 29 metrics for our suppliers to report against
Launched our social value tool in July 2022 and continued to roll the tool out across our supply chain
Created a governance structure in line with our objectives to provide oversight, guidance and resource internally, and set up a supply chain group, initially comprising 24 suppliers and subsequently growing to 43 suppliers
Updated our internal processes to ensure social value is built in at every stage
Launched a regional social value fund, and awarded £32.1k of funds to six projects

Nuneaton Signs wins our first ever social value award

In March 2023, we held our annual awards ceremony in Leeds. This year, our awards included a social value category, which proved to be the most popular category. From over 20 entries, we shortlisted three finalists: Balfour Beatty Ltd for the A63 project; Nuneaton Signs for ‘Social value for every sign’; and Octavius Ltd for the A46 Binley project.

The winning entry was from Nuneaton Signs for work at their factory in Warwickshire, where they have been making road signs (and many other types of signs) since 1982.

Nuneaton Signs are a social enterprise and exist to provide meaningful employment and training for people with disabilities. Part of what makes them such a forward-thinking company is the diversity of their staff, including people who are neurodiverse, with mobility disabilities, communication disabilities, visual impairment, among other physical and mental disabilities. In 2022, Nuneaton Signs employed 73 people, of which 70% have at least one disability.

Their company mantra is ‘Find a way, not an excuse’. They have four guiding principles: social impact; employee wellbeing; growth; and surplus reinvestment.

One of their initiatives is their Supported Internship Programme, which supports 16 to 24-year-olds, often with mental health issues. Typically only 6% of those leaving education with special educational needs secure paid employment. Their programme includes building confidence, improving English and maths skills and enabling people to become independent travellers. Launched in September 2021, their programme has helped the four supported interns who started this course secure paid work post-graduation. In October 2022, they had five supported interns join them, as well as two job coaches. Out of these five young people, three have mental health conditions along with learning disabilities, one is non-verbal and one has Down’s Syndrome.

Regional social value fund

Launched in October 2022, our regional social value fund aims to maximise the delivery of social value through supporting local community projects and providing economic donations.

Through this fund, we offer total funding of £220,000 per year, divided equally between our Regional Investment Programme North and our Regional Investment Programme South.

Our fund is focused on smaller-scale social value projects, ranging from £500 up to £10,000, to support local communities and help generate a positive legacy. Applications to our social value fund are based on direct engagement and feedback from local communities, ensuring we recognise local needs and maximise the positive impact we can have. Larger-scale applications are still supported by our organisation but are managed through our designated funds.

Our A63 Castle Street project is an example of a successful application to our social value fund. This project received £10,000 to support CATZero, a Hull-based charity close to our A63 site that supports young people, those who are long-term unemployed, veterans, former drug users and ex-offenders. Many of the charity's clients have mental health issues and CATZero uses its own yacht to provide sail training to improve health and wellbeing, build confidence and encourage teamwork. The funding will be used to purchase a new mainsail for the CATZero yacht. The sail will be branded with our National Highways logo.

Total funding of

£220,000

per year for our regional social value fund

"We loved the Nuneaton Signs entry – it was really unique and we really liked the company mantra of 'Find a way, not an excuse'. The submission stood out in many ways, not least the work that Nuneaton Signs does to build independence and self-esteem in their younger workforce, transforming these people's lives. It is a truly impressive story of social enterprise."

Dr Joanna White CEng MIET, Roads Development Director

Noise mitigation

Why this topic is material to us

We understand that our network can increase noise for neighbouring homes and communities. This can pose risks to people's health and wellbeing, as well as affect their peace and comfort.

Key performance summary

Delivering better environmental outcomes

Our targets and ambitions

We have a noise mitigation KPI for the second road period.

In 2022–23, we mitigated noise for 985 households using barriers, low-noise surfacing and in-home noise insulation. While this fell just short of our in-year target of over 1,000 households, we still made progress towards achieving our five-year target.

Our 2022–23 results and performance

Installed acoustic glazing and ventilation in

308

properties affected by noise from our network under our noise insulation scheme

Delivered barrier schemes to reduce noise for households alongside sections of the M4 and the M3, benefiting

363

households

Installed noise barriers to reduce the noise for households alongside the M6 junctions 21a to 26, benefiting

313

households

Completed the

CEDR 2018

Noise and Nuisance Programme, part financed by us, delivering research into noise barrier testing and subjective reactions to noise from roads and tyre noise

Preserving cultural heritage

Why this topic is material to us

There are 4,511 cultural heritage assets within the boundary of our network. Cultural heritage consists of historic monuments, historic groups of buildings and/or historic sites.

We have a duty to conserve and maintain the heritage assets in our ownership in accordance with the Protocol for the Care of the Government Historic Estate (Historic England 2017). Other legislation and guidance obliges us to avoid impacts to the historic environment from major projects and our day-to-day operations.

Projects and performance overview

In 2022–23, we:

- continued to support the Secretary of State's redetermination of our A303 Amesbury to Berwick Down scheme, following a legal challenge
- developed a mitigation strategy for our A428 scheme, which will preserve and enhance the historic environment, avoid the more significant heritage assets and preserve by record any remains when there is no alternative but to disturb
- consulted local and national experts and created research strategies for fieldwork ahead of construction on our Lower Thames Crossing and A66 projects
- continued to work within an archaeological framework contract, helping us develop close relationships with archaeological contractors and better understand each other's needs
- set up an archaeological contractor community to provide context for the framework, communicate about industry developments and receive feedback
- embedded archaeological advice in our major project planning

Case study

Historical Railways Estate

Since 2013, we have been responsible for the safekeeping of around 3,100 former railway structures throughout England, Wales and Scotland, work which we undertake on behalf of DfT. These structures are important in helping us understand our railway heritage, often supporting ecology and rare species, and enabling active travel routes. Others have the possibility of being repurposed to support the creation of new greenways and paths, or heritage rail lines.

Over the last two years, interest in our country's heritage assets has grown, with a strong desire to preserve them using traditional methods and materials. As a result of this increased interest, we have received criticism for our use of infilling voids under bridges as a cost-effective method to protect public safety. We have, in some instances, had to seek retrospective planning permission for these necessary remedial works. Safety is at the heart of everything we do as an organisation and our priority, first and foremost, is always to keep these structures and the people who use them safe.

We have, however, transformed our decision-making processes for looking after the estate. We now work more closely with our partners to ensure the repurposing of these assets is sensitively undertaken while still ensuring they remain fit for modern day use. Our partners are experts in the fields of ecology, active travel and heritage rail, and statutory bodies from across the rail, environmental and heritage sectors.

All major decisions about work on our bridges, viaducts and tunnels under consideration for infilling are made after extensive evaluation and consultation, taking into account safety, value for money, heritage and environmental concerns. Our newly formed Stakeholder Advisory Forum is key in this process of due diligence, and we use members' views to help inform our decisions.

The majority of the work we do across the estate helps breathe new life into these structures, keeping them and the public safe, while also ensuring they are maintained for generations to come. We have an annual budget of £9 million to spend on their preservation. In 2022–23, we delivered 265 schemes, of which 179 were in England (68%), 62 in Scotland (23%), and 24 in Wales (9%). Eight of these were major work schemes, including the restoration of Teviot Viaduct's footbridge and Castlefield Viaduct's urban garden.

Teviot Viaduct, also known as the Roxburgh Viaduct, is in the Scottish Borders. In 2022, we removed Teviot's Victorian footbridge, dismantling it into nearly 500 pieces before giving it a much-needed facelift and reconstructing it. Working closely with Scottish conservation officers, we reused as many parts as possible. Elements that were beyond repair were digitally scanned so exact copies could be produced, using techniques including laser cutting, profiling and casting.

We also worked closely with the National Trust and other partners to repurpose Castlefield Viaduct in Manchester, transforming it into a ‘green sky park’. The project was designed to celebrate the industrial heritage of this city and shows how our structures can be brought back into modern day use. The space opened to the public in summer 2022 and has received positive feedback from its visitors.

The majority of our work, however, involves delivering minor work schemes. These include completing general repairs and maintenance, clearing vegetation, repairing masonry and brickwork and improving drainage. We run a programme of annual inspections that allows us to keep a track of the condition of our estate’s structures and identify potential requirements.

Some of our more innovative work this year has included the use of cosmic ray imaging to locate blind shafts inside Balgray Tunnel in Glasgow. This technology, known as ‘muon tomography’, has also been used to scan pyramids, volcanoes and the Fukushima nuclear reactor complex after the 2011 earthquake.

We are proud of our role in helping to protect Britain’s railway heritage. We are committed to engaging with local groups and authorities upfront, so that it is easier for people to have their say on the future of these important structures. Our refreshed Historical Railways Estate website helps to keep our stakeholders and the public informed about our work. This year, we increased the information available on this site to ensure everyone can engage with what we are doing now and, crucially, what we plan to do in the years ahead.

We removed Teviot Viaduct’s Victorian footbridge, dismantling it into nearly

500

pieces, before giving it a much-needed facelift

[Chart]

Our employees

Elaine Billington,
Executive Director Human Resources and Organisational Development

"We are committed to making our organisation a great place to work, with an inclusive culture and people who feel motivated, engaged and proud to work for us."

Our people statistics

Recruitment activity

2,729

vacancies filled

53%

internal candidates

47%

external candidates

High5 recognition

27,089

High5s

6,795

financial awards

£299,020

total awarded through High5

Engagement survey score

67%

engagement, up **2%** from 2022, based on a response rate of **83%**

Early talent

80

graduates and apprentices joined our early talent programme

Extra Mile employee benefits

91%

of our people are registered, with a total of

£38,065

received in savings

Recruitment and retention

Attracting people with the right skills is essential to building and strengthening our organisational capacity and ability to meet our strategic objectives.

In 2022–23, we changed our recruitment provision and structure to enable us to align to the needs of the business. Our updated service will enable us to attract and recruit talent directly through a streamlined and efficient approach. We continue to strive for a healthy balance of recruiting new people from the market and investing in the development of our existing people.

The candidate market remains competitive, with more positions available than candidates. This is noticeably more challenging across specific niche skillsets. Nevertheless, in the year ending March 2023, our overall attrition rate was 9.49%. This was a decrease from the 2021–22 rate of 12%, largely driven by a drop in leaver volumes in the second half of the year.

We remain focused on providing great career development opportunities in an inclusive and flexible working environment at every level of our organisation. We are proud of how many people are advancing their careers with us, while we continue to bring diversity of background, experience and skills into roles to grow our existing capabilities.

2,729	vacancies filled by end of March 2023
47%	filled by external candidates
53%	filled by internal candidates
987	promotions

Talent management and succession planning

In October 2022, we completed the second annual cycle of our revised talent management and succession planning process, which gives all employees a talent review. These reviews showed that most people were in the right role for them at the time, and some have the potential and desire to do more or something different.

We encourage regular career and development conversations. As part of this, we support our people to produce development plans, helping them identify and work towards their career aspirations.

We have continued to use assessment centres for our senior leaders, identifying their potential to move to a more senior or broader role. We have also expanded the use of assessments to incorporate a wider group of colleagues. Everyone who attends an assessment centre is supported in producing a personal development plan.

8	assessment centres were held between April 2022 and March 2023
89	leaders attended the assessment centres
21%	of senior leaders changed roles between 1 April 2022 and 30 March 2023 after attending an assessment centre

Early talent

Our graduates and apprentices are a vital part of our organisation and future talent pipeline. We are planning to have approximately 5% of our organisation as early talent by the end of 2024–25, aligned to our people capability requirements.

Our early talent statistics

80
joined our graduate and apprenticeship programmes

32
started programmes in key areas of digital, engineering and the environment

6
Digital T-Level students joined us

13
year-in-industry and summer interns joined us

52
moved into permanent roles within our organisation

Learning and development

In 2022–2023, we invested £7.8 million in learning and development for our people. Following our transition to a new managed learning provider in March 2022, we continued to deliver a wide range of virtual and in-person courses, ensuring our people have access to the development they need in their roles.

We added 22 new eLearning modules to our internal learning management system between April 2022 and March 2023. In addition to this, we held 1,428 face-to-face or virtual training events across the year.

Leadership development

Our Lead, Collaborate, Succeed management development programme finished in April 2022. In total, we have run 84 two-day workshops, with over 1,200 managers attending and completing over 15,000 hours of training.

Our Executive team held follow-up calls with delegates from the programme and heard positive feedback on how our people were using the tools and techniques in their day-to-day roles.

Our Executive team also completed the Lead, Collaborate, Succeed workshop, experiencing the same training as people managers across our company. This helped us ensure that, as a collective, we remain aligned in our management approach and understanding.

Throughout 2022, we supported individuals to use and build on learnings from the workshops, as well as share best practice. We integrated key tools, models and learning content into our 'People manager essentials' modules, which our people can use at any point to refresh their learning.

To keep our people manager community connected, we launched a Yammer page. This provides a place to share best practice, ask questions and discuss 'real' problems.

Rewarded for high performance

Performance management

We want to create a workplace where, every day, our people give their best, demonstrate our values and feel aligned to our business goals. Through our performance management process, we are embedding a culture which welcomes feedback and motivates people to support the delivery of our investment programme.

During the last year, we embedded regular check-in conversations around performance, development and wellbeing, with a view to improving both individual and company-wide performance. Additionally, we continued to run streamlined year-end reviews, including a simplified self-assessment process, continued emphasis on the importance of year-end check-ins and making use of a light-touch calibration process, where appropriate.

Benefits and recognition platform

Our employee benefits package is an important part of attracting and retaining our people. In 2022–2023, we used feedback from our people to help us review and update our offering.

In September 2022, we launched a green car leasing scheme, providing our people with the opportunity to lease a low-emission new car (electric vehicles and ultra-low emissions vehicles) through a salary-sacrifice arrangement.

We further built on the financial wellbeing package introduced in 2021, providing access to financial webinars, a financial education portal and provider-led support on pensions.

We continued to embed available benefits, including our integrated benefits and recognition platform, Extra Mile and High5, through regular communications. Our High5 platform provides the opportunity to recognise people across the organisation through a congratulatory e-card. Budget holders then have the option to upgrade this recognition to a financial award.

91%	of our people were registered on our benefits platforms by March 2023, compared to **88%** in the previous year
£761,393	was spent through our benefits platforms and **£38,065** saved
27,089	High5s were awarded
6,795	financial High5s were awarded
£299,020	was given through High5 in total
79%	of recognition was given within the same business area
21%	of recognition was given to different business areas

Engaged and motivated colleagues

Employee relations

In 2022, we continued to implement and develop our employee relations strategy and plan.

Key milestones:

- We jointly signed and implemented a new employee relations framework and code of conduct with our trade unions. This sets out how we work in partnership with our recognised Trade Unions, PCS and Prospect. Over the last 12 months, we focused on sharing our joint objectives and commitments, strengthening our working relationships.
- We rolled out a new and improved set of employee relations forums across all regions. These forums provide a structured platform for all people-related issues to be raised and documented. All actions from these forums will be shared and made visible on the new joint National Highways and trade union portal page, implemented after year-end in May 2023.
- We ran a number of internal campaigns to promote our respect at work and flexible working policies, and to support reasonable adjustments.

Engagement survey

Insight from our annual engagement survey in January 2023 gave us a valuable understanding of how our people feel about working at our organisation.

We use the survey results and feedback to inform and build action plans with all directorates across our company. Throughout the year, these plans are reviewed and progress updates provided to our people. The aim is to enable everyone to have a say on potential changes and how they will be implemented.

Our Executive team also produces and publishes an action plan based on company-level results, which outlines areas of focus and identifies opportunities to make a difference in our ways of working.

Engagement champions

We have a formal network of engagement champions across our organisation, with representation in each directorate. We also have a nominated Non-Executive engagement champion on our Board – this year a role fulfilled by Carolyn Battersby. Through this network, we want to create a workplace where our people feel listened to and which encourages honest and open conversations between people at all levels.

Employee communications

This year, we continued to support our people and create a flexible workplace. Communication plays a vital role in keeping us all connected, no matter what location we are working from.

Our aim is to continually support and ensure our people have the right information and resources to succeed in their careers. Communication and engagement play a vital role in helping us create a dynamic, open and honest place to work.

Our engagement survey results

5,372

people provided feedback, representing **83%** of our organisation

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67%

engagement score, a **2%** increase from 2022

74%

of our people stated they were proud to work for National Highways, an increase of **4%** from our previous annual engagement survey

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72%

of our people stated that National Highways cares about their wellbeing, an increase of **1%** since 2022

76%

of our people said they are motivated to do their best work, an increase of **3%**

To help our people feel informed and stay connected, we:

1 Increased our leadership teleconferences

Our leaderships calls are hosted by our Chief Executive and a guest Executive Director to provide leadership visibility and enable engagement between our people and senior leaders. In 2022–23, we changed these teleconferences from bi-monthly to monthly to help our people get the latest updates from around the business. We also changed the format, moving from BT Conference calls to Teams Live. This allowed our communications to be accessible and for more of our people to join the sessions. We now hold three calls a month and are trialling times which are more accessible to our colleagues in operational roles.

2 Actively reviewed and implemented changes to our core corporate channels

We made changes to the layout of our intranet this year, making it easier for employees to get the latest news from around the business and to access useful tools to help them in their roles. We have also worked harder to keep our content up-to-date and relevant, which has seen positive results. Our weekly e-newsletter, for instance, was opened on average by 76% of colleagues from April 2022 to March 2023, a 2% increase on the year before (April 2021 to March 2022).

3 Delivered targeted internal campaigns, recognised at the prestigious SIMPLY Awards

In 2022–23, we won the ‘Internal Communication Team of the Year’ award, as well as being highly commended in the ‘Best Pandemic Communications’ category. We also won four Awards of Excellence at the Institute of Internal Communication Awards in 2022.

A diverse and inclusive culture

Our equality duty objectives

Our overarching ambition for the second road period is to build an inclusive culture that encourages, supports and celebrates diverse voices, internally and externally. Our public sector equality duty objectives, which will run until 2025, are based against three themes:

1. People and places

To create a diverse workforce that reflects the communities we work in, recognises and develops potential and enables everyone to bring their whole self to work.

2. Customers and communities

To deliver an inclusive, accessible road network and services that meet the needs of the diverse customers and communities we serve.

3. Supply chain

To develop a diverse and inclusive supply chain that effectively delivers for its people, road users and communities.

1. People and places

We aim to become one of the most inclusive organisations in the transport sector. We want to create a safe, welcoming and inclusive work environment, where physical and psychological barriers are removed.

We have embedded inclusion into our HR policies and procedures. We also continuously invest in the development and capability of our people. We use data to make evidence-based decisions that support our approach.

Key achievements in 2022–23	
Working with our employee networks	• We continued to engage regularly with our nine employee networks to share our policies and practices. • We worked with the networks to deliver a range of activities, including blogs, articles and webinars to help raise understanding of people's lived experience. • The combined membership of our employee network Yammer groups increased by 23% from 1,881 in 2022 to 2,315 in 2023, with a combined total of 2,818 posts and 25,194 messages read in 2023.

Supporting our EDI champions	• In 2022–23, we increased the number of EDI champions in our organisation by 9% from 2021–22. • We supported our champions to have conversations about our EDI campaigns, resulting in 40% of them talking about EDI at least once a quarter.
Providing data and assessment	• We developed a detailed EDI dashboard which provides live data to support evidence-based decision-making. • We reviewed, improved and launched our new equality impact assessment template to ensure equality is considered in all of our decision-making.
Improving our EDI resources	• In 2022–23, there were 28,072 visits from 1,936 individuals to our 'Who we are' EDI resources library, an increase of 3% from 2022. • In June 2022, we launched a flexible working eLearning package for managers to support our flexible working policy.

For all our EDI stats, please see p117

2. Supporting customers and communities

We are making steady progress towards providing accessible and inclusive services for our customers and neighbouring communities.

Key achievements in 2022–23	
Supporting our customers and improving motorway service area accessibility	• We continued to work with the Hidden Disabilities Sunflower to make the vehicle sticker and magnet available to our disabled customers. These indicate to our traffic officers and recovery services that the occupants have a disability and may need support and understanding during a breakdown on the motorway. Over 15,000 have so far been distributed to our customers and we have identified resources to continue this initiative until at least 2026. • We identified £500,000 to make match funding available to motorway service operators to make improvements in the accessibility of their service areas. Applications have been received and are currently being evaluated. Funded improvements will then be delivered in 2023–24 and 2024–25.

	• We commissioned disability and deaf access training for customer service staff in motorway service areas. This training will be available for all operators to use.
Gathering broader insight from our customers and stakeholders	• We broadened the membership of the Roads for All Forum to new groups (Mencap and Suzi Lamplugh Trust) to bring in a wider range of expertise. This will also help us increase our focus on issues such as the accessibility and inclusivity of our network to disabled pedestrians and lone women drivers. • To improve our insight into the experience of customers with learning disabilities, we worked with Mencap and Ipsos to undertake structured interviews with people with learning disabilities and their families/carers.
Providing accessible information to our customers	• We identified resources to commission the continued updating and publication of the disability access guide to motorway service areas, and to integrate the new disability access standards for electric vehicle charging into these guides. • Working with the British Deaf Association, we are planning a series of roadshows to deaf clubs in each region to raise awareness of how to stay safe when using our roads. This will include a video in British Sign Language to explain how to undertake vehicle safety checks.
Taking steps to become more inclusive	• Our Operations teams continued to embed the equality impact assessment process and templates in their work. We created a library of best practice examples, showing how to engage with local diverse communities and mitigate against potential inequalities. We now have a more streamlined and proportionate equality impact assessment process, which is also robust and measurable. • We commissioned IFF Research and The Equal Group to help develop an approach to access and inclusion. This will support our *Customer service strategy* in delivering for all our customers. The approach will develop a long-term vision of what an accessible and inclusive road network and services should and could look like in 15 years' time. It will cover what we need to do to our organisation, our services and our network to make this a reality.

3. Supply chain

We aim to develop a diverse and inclusive supply chain that effectively delivers for our workforce, road users and communities. To help meet our objectives, we partner with our supply chain to develop capabilities and drive new ways of working.

Key achievements in 2022–23	
Continuing industry benchmarking	• We ran our annual data benchmarking with HS2, Network Rail and Transport for London to understand the diversity of talent within our sector. The data benchmarking reached 260 organisations (a 17% increase on 2021–22), 90 of which were part of our supply chain. We extended our reach into Tier 2 and SME suppliers, with 182 taking part this year (increase of 159 from last year).
Investing in learning and research	• We worked closely with the Supply Chain Sustainability School to develop a Banter toolbox talk and two eLearning modules focusing on inclusive attraction and selection. • We ran six masterclasses, webinars and good practice sharing events from May 2022 to December 2022. We had 386 attendees from 103 different supply chain organisations. The topics included: becoming disability confident; customer service best practice; public sector equality duty update; Operations EDI best practice; phase 1 of the research findings; and data benchmarking playback. • We promoted the Supply Chain Sustainability School's resources, with 61 different supply chain employees completing 1,918 eLearning modules and 426 attending online events. • We completed the first year of our partnership with Leeds University Business School, researching improving EDI performance. We have now entered phase two, where initiatives will be trialled on two live projects.
Measuring and assessing EDI performance	• We continued to measure our suppliers on EDI through our Collaborative Performance Framework: – 14% now average a score of 8 or more out of 10 ('Making a difference') – 52% achieved an 8 or more at some point during the year

	• We added EDI as a requirement to two more supply chain contracts in 2022–23. The data collection activity is now a mandatory requirement within our scope documents for all new contracts. • Our EDI growth matrix is now used as the self-assessment tool for the Supply Chain Sustainability School's Fairness, Inclusion and Respect programme, helping members assess their EDI maturity and access resources. A total of 109 suppliers used this tool since it was launched in July 2022.

Our supply chain

Malcolm Dare, Executive Director Commercial and Procurement

"Over 95% of the investment in our network is delivered through our supply chain. We are working to develop sustainable and long-term partnerships which encourage innovation, deliver efficiencies and provide positive social impact. We engage with our supply chain to promote consistent supplier development across key areas, including health and safety."

Engaging and developing our supply chain

Driving supplier development

We now have over 250 supply chain members engaged in a broad range of development activities. We have also widely deployed our supplier development system through our extended supply chain. This simple, consistent approach enables suppliers to build maturity, increase their skills and improve performance. It is easily accessible to new and existing suppliers, and connects to a huge range of learning and development resources.

We are collaborating across the sector with highways suppliers to address strategic business challenges, including around safety, customer, social value, carbon reduction, diversity and quality.

Refocusing the Roads Academy

In 2022–23, we refocused our Roads Academy to develop current and future leaders and solve sectoral challenges. As we approach the end of the first year under the new approach, we have over 225 leaders (4x old Academy) from 55 organisations (5x old Academy). We run Roads Academy jointly with highways suppliers, using an advisory board to steer the strategic direction.

Through Roads Academy, we work to develop a pool of leaders at all levels of our supply chain who will accelerate change, deliver innovative solutions and support talent retention and attraction in the sector. We continue to tackle a wide range of topics, including social value, predictability, productivity and delivering against our environmental commitments.

Ensuring supplier representation and engagement

Our Engagement Council provides a collaborative forum where we work together with highways suppliers to address strategic business challenges and deliver better value for our customers. We engage regularly with around 250 leaders across the sector.

All our supplier communities are represented on our Collaboration Board. This helps us shape and deliver our priorities through dedicated workstreams on areas such as safety, customer, social value, carbon reduction, quality and supplier diversity. Feedback from our suppliers shows they welcome the strong, clear leadership and opportunity to align on how to tackle key challenges collaboratively. This approach of working together helps maintain supply chain confidence and resilience.

Managing our supplier relationships

We have a maturing Supplier Relationship Management system within our strategic procurement division.

We follow a structured engagement process for key strategic supply chain organisations. This includes monthly meetings, quarterly reviews and bi-annual Executive-to-Executive business reviews. This activity is driving value, while also helping suppliers increase maturity around key areas, including EDI, modern slavery and sustainability. It is also helping us work towards achieving a net zero supply chain network.

Supplier collaboration: improving sector performance

In January 2021, together with our supply chain, we launched a Sector Improvement Programme. This contained six projects focused on improving how the industry performs:

Demand planning

Efficiencies and innovation

Achieving net zero carbon

Implementing new category strategies

Agreeing end-to-end performance metrics

Developing current and future workforce capacity and capability

We are already seeing the positive impact of these projects, including through:

- the adoption of warm mix asphalt into our standards
- new datasets, improving visibility and granularity of our future pipeline
- improving procurement and supplier performance through Gold standard
- working collaboratively with our supply chain to identify opportunities to reduce carbon
- discovering opportunities to work with our suppliers earlier and share efficiency opportunities

CIPS

We are one of only 16 organisations in the world to have been benchmarked at this standard by the Chartered Institute of Procurement and Supply. We are the second ever organisation to have achieved 28/28 criteria at Platinum level.

In the 2022 government commercial benchmarking exercise, we were the highest scoring organisation, achieving 87.5/100.

These are real successes and important milestones for our company, showing the scale of change in the last four years and the standard of excellence we now operate at.

Gathering risk-based supplier insight

Our sector-leading supply chain mapping has enabled us to remain ahead of threats to material supply, inflationary pressures and market constraints. Through greater visibility of the interdependences between suppliers, we have been able to monitor risk indicators to avoid the potential effects of the pandemic or Russian/Ukraine conflict from negatively impacting our programmes. Early assessment of our exposure to restrictions in supply flow has, for example, protected us from reputational damage or concerns in delivering our schemes. It has also driven targeted mitigations.

Monitoring and measuring our suppliers

We have made a strong commitment to long-term collaborative relationships with our supply chain to drive performance improvement across the sector.

Our Collaborative Performance Framework is our primary tool for monitoring and measuring suppliers against a set of metrics. The framework is aligned with our company imperatives and KPIs, ensuring suppliers are measured in line with corporate priorities.

The framework gives us a standard approach to capture data to:

- increase visibility of supplier performance
- benchmark supplier performance
- drive evidence-based decision-making and target improvement actions
- create a shared focus on driving best practice

By maximising performance against metrics which are closely aligned to our strategic objectives and key contract expectations, we help ensure that the remainder of the road period is delivered effectively. This also sets us up for success in the third road period.

Driving innovation in our sector

Setting the pace in the drive for net zero

To deliver on government's commitment for net zero travel by 2050, we need to work closely with our supply chain to exploit low-carbon materials and low-carbon construction plants. We are keen to set the pace and catalyse change, rapidly increasing the speed of innovation in our sector, especially from new entrants and SMEs.

In 2021, we published *Net zero highways: our 2030/ 2040/2050 plan.* In December 2022, we took the next step by publishing our key materials roadmap. The roadmaps for concrete, steel and asphalt, developed with industry partners, show for the first time how the sector could significantly decarbonise and contribute to achieving net zero in construction and maintenance by 2040. We expect our supply chain to take demonstrable action to decarbonise; this will become a necessity for working with us as we move forward.

Using category management

Category management is a strategic approach to procurement. It involves segmenting spend into areas which contain similar or related products, finding opportunities for consolidation and efficiency. We are developing 21 strategic procurement strategies, 18 of which are in implementation phases.

Our strategic procurement strategies and decarbonisation plans can be found on the Supply Chain Sustainability School website.

In 2022, as part of category management, we developed and launched the *Pavement strategic procurement strategy*. We also jointly led development of the Pavement Delivery Framework, which is responsible for contract management. This framework is the mechanism by which we plan to achieve efficiency savings of approximately £181 million.

Category management in the second road period could create potential savings of:

£119.4 million

"Our Collaborative Performance Framework is the primary tool for monitoring and measuring suppliers against a set of metrics."

Overview of category management

Our vision

Our strategic thinking delivers effective solutions for us and the wider public. We work to develop robust and aligned strategic decisions and effective supplier management solutions.

Our support for stakeholders and the supply chain is based on a progressive collaborative approach, using innovative tools and standardised methods.

What we deliver

Through strategic procurement, we develop and implement cross-functional strategies that shape our supply markets.

Our approach delivers operational improvements, such as efficiency savings, productivity improvements, cost reduction and carbon reduction.

By working collaboratively and holistically, we aim to provide thorough market analysis, improved sector knowledge, end-to-end process guidance and standardisation, as well as driving innovation and social value.

Additional benefits from category management in the second road period

Strategic procurement strategies	Potential benefits
Drainage	• Potential savings of £19 million • Standardised solutions • Re-engineering supplier incentives
Pavement	• Potential savings of £98.4 million • Innovation through supply chain partnerships, enabling low-carbon initiatives (for example default warm mix asphalt) • Increased collaboration and early contract involvement through Lean practices
Road markings	• Potential savings of £2 million • Enhanced and standardised solutions • Increased innovation and improved safety • Better environmental ways of working

Preparing for the future

In this section

Digital Roads

Richard Pedley,
Chief Digital and Information Officer

"We recognise the value in driving innovation and continuous improvement across all areas of our company, covering every aspect of our delivery. In 2022–23, our improvements have been wide-ranging, as summarised in this report."

Digital Roads: our three themes

The way we build and use roads will change more over the next decade than over the last century. Digital Roads will harness data, technology and connectivity to improve the way the SRN is designed, built, operated and used. This will enable safer journeys, faster delivery and an enhanced customer experience for all. Our vision and ambition for Digital Roads, published in August 2021, are aligned to achieving these outcomes.

Our Digital Road ambitions

We have set out 35 strategic ambitions for Digital Roads across three themes. We are aiming to achieve some of these ambitions by 2025, with others partially delivered, and the rest due to start in the third road period and beyond.

Our vision for Digital Roads is structured around three core themes:

Digital design and construction

Our activities will be increasingly automated, modular and conducted off-site, resulting in safer production, reduced disruption, increased productivity and smoother journeys.

Digital operations

Our operations will leverage data to drive increasingly pre-emptive interventions, resulting in improved asset resilience, increased asset life and a safer, smoother-running network.

Digital for customers

Our customers will be better informed and have trust in the journey information they access, ensuring that they feel safe and in control of their journeys.

Read more on page 169

Our 2025 Digital Road ambitions

We have developed a set of bold ambitions for 2025 for each of the Digital Road themes:

Digital design and construction

Digitally-enabled design

Scheme designs and long-term planning is based on fit-for-purpose data and enabled by digital tools. We integrate digitised design requirements, existing data feeds, digital design tools and digital twins to enable safer, more efficient and greener outcomes.

Modularised and standardised approaches

The use of offsite fabrication and modular construction is increased and components are standardised. This improves safety, reduces carbon emissions and minimises disruption.

Automated construction

Digital rehearsals and the use of connected and autonomous plant are embedded in our construction processes, improving efficiency and enhancing safety.

Digital operations

Intelligent asset management

Data and technology is harnessed to enable predictive asset management. Better coordination of roadworks and the deployment of connected and autonomous plant will improve efficiency and reduce customer journey disruption.

Enhanced operational capability

Greater automation and network adaptability is enabled through the use of data and sensor technology. When the unexpected does happen, traffic is managed efficiently and customer safety is enhanced.

Digitally-enabled workers

Digitally-enabled workers have access to accurate, up-to-date and consistent information, enabling them to do their work more efficiently and more safely.

Digital for customers

Information provision

Our customers receive accurate, consistent and close to real-time journey information through their preferred digital channels.

Customer engagement

We receive better quality data from our customers, which informs our decision-making and enables our call centre staff to provide excellent customer service. We enable the deployment of vehicle technology and connectivity, focusing on the benefits to customers.

Partnerships and alliances

We work with local highway authorities, transport operators, vehicle manufacturers and technology providers to improve customer experience and provide end-to-end journey support.

Our activities this year

In 2022–23, we progressed the following initiatives:

- Rapid Engineering Model
- Connected and autonomous plant
- Intelligent maintenance techniques
- Single view of the network and data trials
- Every Customer Has an Opinion (ECHO), our real-time customer feedback platform
- Enabling a connected and autonomous future

You can read about our work in each of these areas on our website.

Innovation and modernisation fund

Innovation and modernisation fund

Objective of the fund

We use this fund to explore emerging trends and the full range of opportunities presented by innovation and modernisation. This includes delivering projects which use data and technology to increase the speed and quality of our design and construction, automating repetitive tasks. Through our projects, we look to harness the full extent of innovation opportunities to address issues on our network and add value.

Key 2022–23 achievements

We invested:

£24.9 million

in around

54

projects

These ranged from innovating the way we design, construct and maintain our network to supporting customer mobility and modernising our operation with data-led and digital services.

Key projects funded

Graffiti removal and prevention innovation competition

This work led to improved knowledge of seven existing products and three close-to-market solutions that could be deployed quickly to solve the problem of graffiti prevention and removal, without excessive cost and/or disruption to road users.

Innovative trial to treat road spillages more effectively

This is a collaborative project with the Forensic Collision Investigation Network and our supply chain, involving significant research and development and adopting ground-breaking innovation to enable roads to re-open more quickly.

Trials of ‘swift gates’

Installed on the A3 at the Hindhead Tunnel, these automated taper gates replace the use of manual coned tapers. This innovative solution is aimed at delivering a step change in efficiency and safety where regular lane closures are required, for example in a tunnel.

Using reflective aggregate in the asphalt mixture

Higher reflectivity means less artificial light is needed to illuminate the highway, while not detracting from road markings. We also expect improved thermal properties, with the retroreflective aggregates forecast to reduce surface heat by 10°C, improving durability and reducing maintenance spend. This will be particularly important because of the forecast impact of climate change.

Cyber security

During the year, our Chief Information Security Officer continued to build a sustainable cyber security and information rights organisation. We launched our new *Cyber security strategy*, recruited a diverse range of professionals and strengthened our Cyber Improvement Portfolio.

The journey to digital resilience

[Diagram]

Cyber security strategy

Launching our *Cyber security strategy*

In March 2022, we launched our *Cyber security strategy.* This set out how we will ensure our digital capability, services and systems are secure by design and default. In this strategy, we also defined the steps towards managing cyber security risk within Board tolerance.

Cyber security is seen and classed as one of our highest-level risks today, and we recognise that it's a really challenging area for us – as it is for everyone. It's a fast-changing environment that we must keep pace with, and we are working hard to scale up our resources and activities accordingly.

A key in-year achievement includes implementing and promoting a culture of cross-organisational collaboration, proactively contributing to government's second strategic pillar of 'defending as one'. We completed an awareness campaign across the business to encourage a security-minded approach and to bring all colleagues into a collective security effort. On a more technical level, we established a SecDevOps team and implemented a significant uplift of security controls in our hosting environments.

Improving our horizon scanning capability

As we progress towards our Digital Roads vision, security, privacy and trust are becoming increasingly interlinked. In March 2022, we launched a horizon-scanning capability, known internally as Cyber Futures. This will enable our cyber security to scale at pace with global technology advancement.

We began by completing a quantum risk assessment to understand our risk exposure to this emerging technology, and completed a series of awareness sessions across the business to highlight this emerging risk. We also assessed technologies critical to our net zero agenda to ensure future deployments are secure by design and default. We worked closely with suppliers to share our findings. Furthermore, we worked closely with major programmes to begin developing security guardrails for digital construction.

Digital Resilience Programme

Russia's invasion of Ukraine created a profound shift in the global cyber threat level, fuelled by an increasing proliferation of commodity hacking tools and the industrialisation of 'ransomware-as-a-service'.

In response, in November 2022, we launched a new programme within our Cyber Improvement Portfolio: our Digital Resilience Programme. This focuses on driving organisational change to ensure that our most critical services and systems can withstand, respond to and recover from any unexpected events. In our work to date, we have engaged over 100 stakeholders across our company supply chain to assess the digital resilience of four out of 14 critical services. We have completed 11 wargaming and tabletop exercises, and identified 156 risks, threats and vulnerabilities. We have already fully mitigated 10 of these, and 70 more are in progress to be mitigated.

We developed 10 policies to address gaps against industry standards (NIST and ISO 27001). We also established the Digital Resilience Forum, enabling collaboration and awareness around digital security and safety risks, and we built awareness of enterprise-wide operational and incident management frameworks within our digital team.

Enterprise-level controls

Over the past year, we implemented a number of new enterprise-level controls, including those around identity. These are security controls which can be implemented across our entire environment, and therefore have large-scale impact.

Additional security controls are applied based on risk, with our critical services prioritised to ensure the safe and secure delivery of digital services on the SRN. In common with all providers of critical infrastructure, identity and access-control risk is significant. Alongside our improvement programme, we have therefore introduced tactical short-term improvements, particularly around joiners, movers and leavers. All other security capabilities delivered measurable improvements, with security operations continuing to extend our monitoring capabilities.

Supporting operational technology

In response to business need and regulatory requirements, we continued to assess and focus on critical services underpinned by operational technology. We focused, in particular, on our regulated assets, developing a service to assess our security posture against the Network and Information Systems Regulation 2018. We successfully delivered this to our regulator in March 2023.

Improving governance

We are further working towards supplementing reporting of events that have already happened with information about the status and risk levels of our critical services. This will help ensure our Audit and Risk Committee can be kept fully informed in the current dynamic environment, and to support more informed security investment decision-making.

Operational technology

Every day, our customers and people rely on operational technology services for safe, reliable and efficient journeys on our roads. This technology can be found at the roadside and in our regional operations centres; many of our services are not visible to customers, but they help them safely reach their destinations.

Ensuring the quality of our operational technology: key projects

Improving roadside technology

In September 2022, we mobilised a programme to improve the availability of roadside technology, which will see us investing £105 million in all lane running smart motorways by the end of the second road period. Key in-year achievements include the delivery of 1,926 technology assets across our all lane running smart motorways that had been identified for modernisation.

Key in-year achievements:

- Delivering:

1,926

technology assets across our all lane running smart motorways that had been identified for modernisation

Types	Number of devices	Estimated cost £m
Cameras	577	£30.21
MIDAS radar	1,049	£35.70
Signals	197	£12.03
Message signs	103	£17.82
Total	1,926	£95.77

[Charts x2]

Using insight monitoring tools

This year, we started to deploy insight monitoring tools to increase our situational awareness of technology performance. This will increase the speed of finding and resolving faults, ideally before they even occur. In 2022–23, the service was applied to stopped vehicle detection services, and will be extended to cover CCTV, signs and signals and traffic management in 2023–24.

Key in-year achievements – launching:

- TPAM: the technology performance and availability management capability for tracking real-time technology incidents
- GOTT: the geographic operational technology tool, used to report on asset health, availability and incidents
- The smart motorway scorecard for tracking technology and operational performance

[Diagram of our Smart Motorway Scorecard]

Improving governance

In late 2022, we formed a new Executive-led, cross-functional Operational Services Strategy Management Group, which will provide steer, oversight and governance across our operational technology services lifecycle.

[Diagram of our new governance structure]

Providing a service-based delivery model

We are updating our operating model to bring increased focus to the design and build of end-to-end services which put the user at the heart of decisions and priorities. This will help move our organisation to a product and agile delivery model, which works across functional silos. This new model is now active across stopped vehicle detection, and will be extended across traffic management and CCTV over the next year.

Managing our risks

We work closely with our partners and stakeholders to mitigate the impact of risk across our broad range of activities at operational, tactical and strategic levels.

Overview of our process

Our risk management process focuses on the early identification, assessment and management of risk. Our underlying principles are that risks are:

- identified, assessed and mitigated in line with our risk appetite
- monitored continuously
- reported through our established procedures

All risk aligns to our strategic outcomes, and the Board and our Executive team work together to identify, review and monitor these throughout the year. Our people are encouraged to identify, prioritise, manage, monitor and report all risks relevant to their working area. On a periodic basis, we review these risks and use the outputs to refresh and report our risk register information to the appropriate levels of our business.

[Diagram showing key elements of our risk management process.]

A. Risk planning: Our policy, processes and procedures define the internal or external criteria to be considered when identifying and managing risk.

B. Risk identification: We have a defined process to help identify, recognise and describe opportunities and threats to strategic, programme, project and operational objectives.

C. Risk assessment: We assess the probability and impact of all risks against a matrix that recognises that any risk has the potential for multiple impacts. We encourage the risk owner to identify the most important impact, and this helps us prioritise our response.

D. Risk evaluation: We compare the level of risk assessed with our risk appetite, which is set by the Board, to help the risk owner prioritise management activity.

E. Risk treatment: We identify actions to increase opportunities and reduce threats, putting controls in place. We identify any further activity that will help the risk owner manage the risk.

F. Risk review, reporting and escalation: We structure this area so that:

- risks and opportunities are managed in line with our risk appetite
- risks are updated as additional activity to manage them is delivered
- risks are escalated to senior management for information, review and/or further management

G. Communication and consultation: We consult and communicate with internal and external stakeholders through all stages of our risk management lifecycle. This helps us increase understanding and improve risk management capability across our business.

Governance

The Board has overall accountability for determining our risk appetite: the amount and type of risk that we are willing to take to meet our strategic objectives. Oversight of our risk management framework and its effectiveness is delegated to the Audit and Risk Committee. The outcomes from their work feed into the Board's wider business discussions.

Our principal (or 'corporate') risks are owned by our Executive team and monitored by the Board. In addition, each Executive Director owns the risks relevant to their area of accountability and delegates the management of them to the appropriate functions within our business. Risks that sit at this level are known as secondary risks and are linked directly to the relevant principal risk/s held on our corporate risk register. This allows us to keep our principal risks broad, recognising that their attributes can be managed in the right part of our business. Collectively this helps us to understand our overall risk exposure.

We link our principal risks to our corporate governance forums at Board and Executive levels. This allows the Board to maintain strategic oversight of each risk. It also provides assurance to the Board that risk strategies are working as intended and that any discussion or decision is made in full knowledge of the risks it may impact. At Executive level, linkage provides a greater opportunity to manage risk control frameworks and direct mitigations to reduce risk exposure or materialisation.

Collectively, the Board and our Executive team maintain visibility of all risks sitting at principal and secondary levels, including status and mitigation plans, through our periodic risk reporting and review process.

Identification of risks

Identifying risk is a continuous process. The Board and our Executive team complete a full refresh of the principal risks and their mitigations on an annual basis. This is updated throughout the year if new risks emerge. Our Executive team works with their teams to manage these within our company's risk appetite.

Each Executive Director identifies and manages risks relevant to their area of accountability. These secondary risks can be identified at any level of our business and are escalated or cascaded to the relevant directorate for ownership and management. Secondary risks form a link to those that sit on our corporate risk register and are closely monitored to help us to understand our overall risk exposure.

The identification and coordination of programme and project risk is the responsibility of our programme risk managers. This feeds into the overall portfolio-level view and, where relevant, any portfolio risk will then link into the corporate risk register as a secondary risk.

Oversight of risk at all levels is provided by our Corporate Assurance Division to ensure a cohesive view across our organisation.

Our risk culture builds on our company values, and our framework gives us the structure through which we can consistently escalate, prioritise, enhance, action, monitor and report risks.

Risk management is embedded as a key component in our decision-making. This enables individuals and groups to make the right decisions in an informed manner.

Evaluation and management of risks

We consider external and internal risks that could affect our ability to achieve our strategic goals or locally-set objectives.

We use a risk scoring matrix to evaluate risks against likelihood, impact and timing, and this is linked into our risk appetite framework. We assess each risk against:

- the inherent risk, which is the level of the risk without any control or mitigating action
- the residual risk, which is the level of risk that remains after we have considered the effect of controls in place and any further mitigating actions necessary to reduce
- the forecast risk, which is the potential future level of risk if all agreed controls and mitigating actions are implemented effectively and known events materialise as anticipated

We complete a formal review of the corporate risk register on a quarterly basis, in addition to an annual refresh exercise. Results are reported to our Executive team and the Board and appropriate direction received and implemented.

Our risk appetite framework

Introduction

Our risk appetite statement describes the amount of risk that we, as a government-led organisation, are willing to be exposed to in the pursuit of our strategic goals and objectives. It forms an important part of our corporate governance and sets the tone for good risk management practice. It underpins our policies, processes and procedures and, when used correctly, the statement will support effective decision-making and demonstrate the rationale for those decisions.

As risks change continuously, this statement is updated and reviewed annually by the Board.

Our risk appetite statement

As an organisation with a trusted delivery reputation, we will encourage a risk-aware culture that allows our people to take calculated and proportionate risks to deliver our strategic goals successfully. Where appropriate, we will grasp all potential opportunities where innovation and creativity sit hand-in-hand with accountable, balanced and risk-based decision-making.

Overall, we have set our risk appetite at a balanced (or medium) level, ensuring we consider all potential opportunities and benefits. We have a low appetite where our control framework is new or where our actions will compromise: the safety of our customers, people or supply chain; our reputation; our integrity; or the effective use of public funds to deliver our strategic goals and objectives.

How we apply this

Our overarching appetite statement is supported by a series of individual risk appetite ranges, aligned to our strategic objectives. The statement and the appropriate appetite range should be used in empowering risk-based decision-making to achieve our strategic goals and locally-set objectives.

Management of our risk appetite is set through defined tolerance levels to help the escalation or cascade of risk information throughout the organisation.

Our risk appetite framework is an essential tool to identify if we are taking unknown or excessive risks. By applying this approach to any decision or identified risk event, the risk owner will be able to know whether a current risk (the amount of risk that remains after controls are accounted for) is within range or requires escalation to the next governance level for discussion, approval or management.

"Identifying risks is a continuous process. The Board and our Executive team complete a full refresh of the principal risks and their mitigations on an annual basis. This is updated throughout the year if new risks emerge."

Developing capability

Our people are aware of their responsibilities to understand and highlight risks that might affect our ability to achieve our strategic goals. We have an established network of risk champions across our organisation, who identify the risks facing our business and share expertise and good practice. Within our project environment, we have a group of risk managers feeding information from project to programme to portfolio.

Online risk management training is available for our project risk managers. Risk awareness training is available for non-specialist staff whose role involves risk management to a lesser degree.

The business is further supported through the work of recognised risk business partners. The role of these business partners is to enable good risk management practices and evolve enterprise risk management throughout the business.

Assuring our risk

We have several teams who work together to help us manage risk. Each team has a unique perspective and specific skill sets. Their duties are coordinated carefully to avoid gaps and duplication of activity.

We have created a four lines of assurance model which provides the Board with an appropriate level of comfort that we are managing risks pragmatically, proportionately and in line with our defined risk appetite.

Our four lines of assurance model

We use each line of assurance to provide a level of oversight. This model allows each risk owner to draw from a breadth of information and rely on assurances obtained at the most appropriate level, relevant to the risk being managed.

1. Management control	2. Corporate oversight	3. Internal and independent assurance providers	4. External and independent assurance providers
Assurance through: • Business reporting • Applying operational controls • Authorisation and sign-off	**Assurance through:** • Policy compliance review • Inspection • Quality assurance reporting • Business and project review • Risk reporting	**Assurance through:** • Internal audit • Programme assurance • Health and safety assurance • Counter-fraud	**Assurance through:** • National Audit Office • Transport Focus • ORR • DfT client and Shareholder teams

		• Contract assurance • Risk assurance • Analytical assurance	• Infrastructure Projects Authority • Other • Authorisation and sign-off
Risk content: accountability • Implement actions to manage and treat risk • Comply with risk management processes • Implement risk management processes, where applicable • Execute risk assessments and identify emerging risk	**Risk content: accountability** • Establish policy and process for risk management • Provide our strategic link for risk, including oversight of risk themes and trends, synergies and opportunities for change • Provide guidance and coordination across our business • Liaise between the first, third and fourth line of assurance activity	**Risk content and process monitoring** • Liaise with senior management and the Board • Rationalise and systematise risk assessment and governance reporting • Provide oversight on risk management content and processes • Provide assurance that risk management processes are adequate and appropriate	

Principal risks and uncertainties

Our risks are linked to our company's strategic outcomes, objectives and KPIs. To provide a broader sense of the level of exposure, we group all risks under our three imperatives: safety, customer service and delivery. This allows the Board and our Executive team to focus their attention on areas of significant movement, rather than discussing each on a risk-by-risk basis. It also provides a different lens to show our data, recognising that risks can be assessed against more than their category, such as financial, operational or environmental.

Imperative	Strategic outcome		Principal risk description
Delivery	**Licence to operate**	**1**	A serious breach of our statutory duties, Licence or corporate prosecution could lead to potential fines or loss of liberty, revocation of our Licence to operate or an inability to deliver our commitments.
Delivery		**2**	An impact on either the confidentiality, integrity or availability of our critical services, systems or assets that could lead to significant business interruption or a failure to manage our network or the business effectively, impacting safety and reputation.
Customer		**3**	Public concerns of smart motorway safety performance may lead to increased stakeholder scrutiny, which deflects attention away from other RIS2 deliverables.
Customer		**4**	High-profile criticism, erosion of stakeholder or customer trust or confidence may lead to increased costs or delays to the delivery of our RIS2 business plan, or revocation of our Licence to operate.
Safety	**Improving safety for all**	**5**	Ineffective control over safety, health and wellbeing threats may lead to staff and road workers being harmed physically or mentally.
Safety	**A well-maintained and**	**6**	A major asset failure on our network may lead to multiple deaths, injury,

	resilient network		damage to vehicles or property and loss of service on the network.
Delivery		**7**	Inability to respond, maintain and recover technical outages within agreed availability targets may lead to operational and corporate impacts, as well as safety consequences and reputational damage.
Delivery		**8**	Failure to deliver in an increasingly complex environment may lead to significant erosion of stakeholder and customer trust to deliver, thereby negatively impacting our future investment settlement.
Delivery	**Delivering better environmental outcomes**	**9**	We underestimate the scale or pace of change required to meet government's environmental targets, which may lead to irreparable or long-term harm to the environment, or significant environment-related adverse health impacts on people.
Customer	**Meeting the needs of all road users**	**10**	Failure to listen, influence or respond to our customers effectively may erode their confidence in our ability to operate as the strategic highways authority.
Delivery	**Achieving efficient delivery**	**11**	A misalignment between the required and available capability or capacity of our supply chain may mean that we deliver a less efficient or lower quality outcome, leading to a reduced ability to deliver the RIS outputs and associated benefits.
Delivery		**12**	We are unable to recruit and retain suitable and capable senior or specialist staff, which may lead to a reduced ability to deliver our strategic objectives as a high-performing organisation.
Delivery		**13**	Recognising the complex and challenging environment in which we work, we may fail to promote our Lower Thames Crossing scheme successfully, which may lead to delays in key decisions.

Our risk assessment

The risk heat map illustrates the relative positioning of our principal risks, as listed on pages 184 and 185. It shows the risks before controls are applied, referred to as ‘inherent’ in the strategic risk table on pages 186 to 196. It also shows the risks once controls have been applied, described as ‘residual’ in the strategic risk table. We also set out further details on our principal risks in this section, explaining how they link to our three imperatives and summarising our key risk mitigation strategies.

[Risk map showing the likelihood of each risk, before and after controls have been applied.]

“Effective risk (and issue) management is crucial to enable us to make informed decisions and to budget realistically for risk and uncertainty. This year, through improving our visibility and understanding of how risks (and their controls) are linked across the business, we have ensured that robust safeguards are in place, allowing us to take swift and targeted action when required.”

Sharon McCarthy, Divisional Director, Corporate Assurance

<table>
<tr><th>Principal risk</th><th>Summary of controls in place</th><th colspan="2">Risk commentary</th></tr>
<tr><td colspan="2">Safety risk 5</td><td>Inherent:
Major/Likely</td><td>Residual:
Major/May Happen</td></tr>
<tr><td>Ineffective control over safety, health and wellbeing threats may lead to staff and road workers being harmed physically or mentally.</td><td>We set our contractual obligations to ensure certain health and safety standards are met, including the use of competent contractors at all levels.
Our Health and Safety Management System incorporates policies and processes that direct our people and ensure the control of contractors.
We monitor health, safety and wellbeing actions and performance at all levels to ensure that measures are taken to constantly improve the management of health and safety risks. At Board and Executive levels, this is</td><td colspan="2">Our Home safe and well approach has evolved throughout the year, with directorate plans being updated and our Be the Change leadership programme taking exciting steps forward.

Our safety performance (employee and supply chain accident frequency rates) can be found on page 68.

More detail on our approach can be</td></tr>
</table>

Principal risk	Summary of controls in place	Risk commentary	
	monitored and reviewed monthly. • We have an ongoing monitoring regime, including inspections, leadership tours, accident reviews and compliance and assurance reviews. • We have dedicated health and safety professionals across each region and programme team who provide health and safety advice and support to our business. • Our occupational health, employee assistance programme and wellbeing services provide confidential professional support and early intervention, including counselling, physiotherapy and legal advice for all our people. The service also provides health assessments, tools, information and coaching for our people to help them improve their health and wellbeing. We provide wellbeing events throughout the year. • We have an established wellbeing programme in place, including awareness training for line managers to drive alignment to what we are delivering, and how.	found on page 63.	
Safety risk 6		**Inherent: Extreme/Likely**	**Residual: Major/May Happen**
A major asset failure on the network may lead to multiple deaths, injury, damage to vehicles or property and loss of	• We have competent and trained individuals working within asset-specific areas to develop and deliver effective maintenance and renewal functions. • Our standards, policies, guidance and specifications for each asset class set out clear mandatory requirements	We continually monitor the condition of our network and carry out investigations of any potential defects. Our maintenance and renewals programmes are based on the needs of our assets and our	

<table>
<tr><th>Principal risk</th><th>Summary of controls in place</th><th colspan="2">Risk commentary</th></tr>
<tr><td>service on our network.</td><td>to achieve safe and effective asset construction and performance. This is supported by comprehensive maintenance and renewal technical and strategic governance, supported by senior cross-directorate strategic governance arrangements.

• We have a comprehensive programme of inspections for all asset classes to ensure that safety defects are correctly identified. This is supported by a full programme of maintenance and renewal activities to ensure that standards are consistently and effectively applied and appropriately assured.

• Our asset-specific information systems provide access to condition and inventory data, enabling the development of our asset intervention programmes. This is supported through our set asset data standards, which describe the format of the data we collect and use.</td><td colspan="2">customers in each region. More detail on our approach can be found on pages 40 to 62 of this report.</td></tr>
<tr><td colspan="2">Customer services risk 3</td><td>Inherent:
Major/Likely</td><td>Residual:
Major/Likely</td></tr>
<tr><td>Public concerns of smart motorway safety performance may lead to increased stakeholder scrutiny, which deflects attention away from other RIS2 deliverables.</td><td>• We continually monitor and evaluate safety data to ensure smart motorways fulfil their safety objectives. This safety data analysis is subject to internal and external assurance (including by DfT and ORR).

• We track our smart motorway portfolio to establish that anticipated benefits are realised for aspects of our work, and to confirm if our actions have improved and increased public confidence in their operation.

• Recognising public concerns, a dedicated team has</td><td colspan="2">We are continuing to deliver against the commitments set out in the Secretary of State’s Smart motorways safety evidence stocktake and action plan and the Transport Select Committee’s recommendations. We also monitor safety and performance data across our network and respond to trends with appropriate improvement plans</td></tr>
</table>

Principal risk	Summary of controls in place	Risk commentary	
	been established to coordinate smart motorways activities. • We have ongoing delivery of public information campaigns, communications and road safety initiatives to increase public awareness and knowledge.	and activities, as required. For more information, please refer to our Smart motorways stocktake second year report 2022.	
Customer services risk 4		**Inherent: Extreme/Likely**	**Residual: Major/May Happen**
High-profile criticism, erosion of stakeholder or customer trust or confidence may lead to increased costs or delays to the delivery of our RIS2 business plan or revocation of our Licence to operate.	• We have regular, structured engagement with our key stakeholders, including ORR and Transport Focus. We hold regular surgeries, forums and meetings with MPs to discuss key topics and activities. • We have a proactive communications and engagement programme aligned to our communications strategy for 2020–25. Our Executive team and the Board review delivery progress. • We have dedicated processes to monitor and analyse audience insight and perceptions data, as well as to evaluate the effectiveness of campaigns and media activities. • Our crisis management process ensures strategic oversight and management of high-profile risks to reputation.	We communicate with multiple audiences on a regular basis. We work hard to listen to, and engage with, them to evaluate the effectiveness of our campaigns and media activities.	
Customer services risk 10		**Inherent: Major/Likely**	**Residual: Major/May Happen**

<table>
<tr><th>Principal risk</th><th>Summary of controls in place</th><th colspan="2">Risk commentary</th></tr>
<tr><td>Failure to listen, influence or respond to our customers effectively may erode their confidence in our ability to operate as the strategic highways authority.</td><td>• Our Customer service strategy outlines our key themes to deliver improved customer experience.
• Our Executive-led Customer Services Committee oversees cross-business activity and ensures that it is in line with our Customer service strategy. This is supported by our customer service director community, who are responsible for understanding the needs of our customers within their business areas. They are also responsible for delivering specific elements of the Customer service strategy and plan.
• We work in collaboration with Transport Focus to ensure our research and insight are aligned and to better identify our customers' needs. Through this we develop our annual customer service plans, which in turn underpin our Customer service strategy.</td><td colspan="2">We want to make a difference for our customers, which means focusing on what is important to them. We are responding to the evolving needs, wants and expectations of our customers to deliver improvements now and create a positive legacy for the future.</td></tr>
<tr><td colspan="2">Delivery risk 1</td><td>Inherent:
Extreme/Likely</td><td>Residual:
Major/May Happen</td></tr>
<tr><td>A serious breach of our statutory duties, Licence or corporate prosecution could lead to potential fine or loss of liberty, revocation of our Licence to operate or an inability to deliver our commitments.</td><td>• Should an incident arise, we have an expert in-house legal team, and we engage with specialist services who work together to provide advice and protect our legal position.
• We plan for such events and engage proactively with our Shareholder and key stakeholders to keep aligned on key issues and legal matters.
• We have a well-established corporate governance structure for all company decisions. This is supported by</td><td colspan="2">We work hard to ensure that such events do not occur, but the nature of our activities is such that these types of events must be anticipated. Using the controls described, we take the appropriate steps to plan for and, should it occur, manage any event of this kind.</td></tr>
</table>

Principal risk	Summary of controls in place	Risk commentary	
	our business policies and processes that provide the framework for operating the SRN in line with regulatory requirements. Compliance is monitored regularly. • Suppliers are regularly monitored against modern slavery and other UK economic crime law to ensure that their activities are in line with legislative requirements.		
Delivery risk 2		**Inherent: Extreme/Likely**	**Residual: Extreme/Likely**
An impact on either the confidentiality, integrity or availability of our critical services, systems or assets that could lead to significant business interruption or a failure to manage our network or the business effectively, impacting on safety and reputation.	• We have multi-factor authentication, as recommended by the National Cyber Security Centre. This is enabled on our Office 365 and Enterprise Resource Planning environments. • Our policies, procedures and processes define the governance, control and management activities over all critical data, information, records or systems that we hold or use in the normal course of our work. • We have a defined risk assessment framework where we risk assess and assure the design, build and implementation of any technology solution on and off our network. This helps minimise the likelihood or impact of a cyber-related incident. • We monitor across the industry and collaborate with UK intelligence agencies, accept government best practice and act on the guidance of the National Cyber Security Centre. The Board and Audit and Risk Committee regularly review the management of all significant cyber	Since 2015, we have increased our capability and capacity to understand and improve our data management and security processes. We are improving our cyber security practices, and we work proactively with our people and our supply chain to reduce the risk of non-compliance. We also promote the fair and ethical handling of personal information and work to improve our overall control environment in line with the National Cyber Security Centre advice.	

Principal risk	Summary of controls in place	Risk commentary	
	risks. • We have monitoring capability on both our company domain and laptops. External cyber access is restricted for critical elements of our systems, reducing the ability for external attackers to target certain information assets.		
Delivery risk 7		**Inherent: Extreme/Likely**	**Residual: Major/Likely**
Inability to respond, maintain and recover technical outages within agreed availability targets may lead to operational and corporate impacts, as well as safety consequences and reputational damage.	• We have a defined risk assessment framework for both information and operational technology, which evaluates and assures the design, build and implementation of any technology solution on and off our network. • Our business criticality assessment of our data and systems informs investment decision-making, taking a risk-based approach.	We have a vision for the digital transformation of our network between now and 2050. This is based on using data, technology and connectivity to improve the way our network is designed, built, operated and used. We understand the potential risk and opportunities this could present and are working to manage their effects to achieve our long-term ambition in this area.	
Delivery risk 8		**Inherent: Extreme/Likely**	**Residual: Major/May Happen**
Failure to deliver in an increasingly complex environment may lead to	• Our Capital Portfolio Management (CPM) provides robust monitoring, reporting and escalation arrangements to give confidence to stakeholders on our	During the first road period, we learned some valuable lessons, which we are using to improve the	

Principal risk	Summary of controls in place	Risk commentary	
significant erosion of stakeholder and customer trust to deliver, thereby negatively impacting our future investment settlement.	progress against our commitments. CPM manages stakeholder engagement and communication to enable better decision-making and provide early warning to emerging threats. • We ensure that our core control systems use assured data to improve informed decision-making. This engages early warning indicators to encourage early active management and mitigation to minimise project budget and schedule issues materialising. • We have an established project control framework, which meets best practice standards and is applied to all major programmes and projects. • We have a robust change control process which allows us to raise and agree scope or portfolio changes either internally or externally with DfT. • We optimise project organisation by having the right skills and capabilities balanced between ourselves and the supply chain.	delivery of major infrastructure projects in this road period and into the future. We have shared these lessons within our organisation, across government and with the wider industry.	
Delivery risk 9		**Inherent: Extreme/Likely**	**Residual: Major/Likely**
We underestimate the scale or pace of change required to meet government's environmental targets, which may lead to irreparable or long-term	• All our projects are supported by environmental advisers to promote good technical practice, challenge poor practice from our supply chain and provide environmental technical assurance to our project teams. • We invest through our designated funds. This money is allocated to four funding streams, including environment	We are committed to protecting and improving the environment for current and future generations. Our activities are comprehensive and wide-ranging, from delivering air quality initiatives and procuring renewable energies to maximising	

Principal risk	Summary of controls in place	Risk commentary	
harm to the environment or significant environment-related adverse health impacts on people.	and wellbeing, and focused on improvements that will make the biggest difference and deliver lasting benefits. • Requirements in our environmental sustainability standards and specifications set out the minimum needs and expectations. They are kept under frequent review across each road period. • Procurement clauses are reviewed regularly to ensure alignment with policy and strategic objectives. • We engage with other government departments, institutions and academia to ensure we understand and implement the change required to meet targets. • We review, manage and report progress on a monthly basis against our net zero plan, alongside government's *Transport decarbonisation plan*. This is supported by our Carbon Net Zero Steering Group (on an annual basis).	biodiversity and preserving cultural heritage. You can read more about our ambition, commitments and how we protect the environment on pages 91 to 113.	
Delivery risk 11		**Inherent: Major/May happen**	**Residual: Severe/May happen**
A misalignment between the required and available capability or capacity of our supply chain may mean that we deliver a less efficient or lower quality outcome, leading to a reduced	• We have dedicated resource focused on supplier risk scanning. We share this intelligence through the Supplier Watchlist at the Group Commercial Board, an interface with Cabinet Office and DfT. • We have an established approach to managing relationships with the first two tiers of our supply chain. We have dedicated lead relationship managers to help improve collaboration, communication and provide early	Over 95% of the investment in our network is delivered through our supply chain. We are working to develop sustainable and long-term partnerships which encourage innovation, deliver efficiencies and provide positive social impact. We engage with our supply chain to	

Principal risk	Summary of controls in place	Risk commentary	
ability to deliver the RIS outputs and associated benefits.	warning of potential capability and/or capacity issues. • Our Collaboration Board and Supplier Engagement Council meet regularly throughout the year to ensure our organisational strategy is visible to our supply chain. • We maintain a contracts library, which is updated regularly throughout the year. This improves the accuracy of our forecasting and enables the supply chain to build their capacity and capability. • We have a supplier development system (toolkit) which develops supplier maturity and capability.	promote consistent supplier development across key areas, including health and safety. For more information on our supply chain, see pages 162 to 166.	
Delivery risk 12		**Inherent:** **Major/Almost Certain**	**Residual:** **Major/Likely**
We are unable to recruit and retain suitable and capable senior or specialist staff, which may lead to a reduced ability to deliver our strategic objectives as a high-performing organisation.	• Our business cases are created using robust benchmarking, market insight and analysis of comparator roles. In some cases, we employ specialist consultants to complete an independent review of our approach to ensure the accuracy and validity of the information used. • We hold regular Board, Executive and directorate leadership team reviews of senior vacancies and use our internal assessments for our senior talent pools to drive senior talent appointments, where appropriate. • We have cultivated effective strategic relationships with DfT and other stakeholders.	Attracting people with the right skills is essential to building and strengthening our organisational capacity and our ability to meet our strategic objectives. We strive for a healthy balance of recruiting new people from the market and investing in the development of our existing people. For more information on our people, see pages 148 to 161.	

Principal risk	Summary of controls in place	Risk commentary	
Delivery risk 13		**Inherent:** Extreme/Likely	**Residual:** Extreme/Likely
Recognising the complex and challenging environment in which we work, we may fail to promote our Lower Thames Crossing scheme successfully, which may lead to delays in key decisions.	• We have an established engagement framework with our strategic and statutory stakeholders. This allows effective communication in a timely manner and provides transparency in how we deliver our programme. • Our programme governance framework provides for effective and timely oversight of all key deliverables. This allows us to alert the Board and our statutory shareholders to potential issues, changes or risks, which can be discussed, and additional mitigation agreed, implemented and monitored. • We regularly focus and share knowledge on our programme management baselines, integrated project controls and cost forecasting to increase knowledge in our programme management office. This helps to provide early warning of potential issues and new risks, which can then be managed quickly and more effectively. • We follow our change control process. This provides a formal route for agreed changes to the programme, developed with input from, and agreement with, our statutory stakeholders. • We invite government department representatives (as appropriate) to policy-level discussion to continue to work collaboratively and adapt swiftly to future changes.	This is the single biggest road investment project since the M25 was completed more than 30 years ago. We recognise that our stakeholder community, which ranges from government to environmental groups and local communities, are a key element of our ability to deliver this scheme successfully. We are working hard to build, maintain and retain good working relationships with everyone.	

In-year risk management

Risk is an inherent aspect of our company's administrative and commercial business activities. Effective risk (and issue) management is crucial to enable us to make informed decisions and to budget realistically for risk and uncertainty. Ultimately, this helps improve confidence in our ability to deliver our strategic outcomes.

In 2022–23, our cycle of review and testing of our enterprise-wide risk management approach has led to further framework enhancements, including:

- refreshing our *Corporate risk strategy* and re-baselining the programme of activity that underpins it
- simplifying the language used to describe risk activities or topics in documents and conversations to ensure consistency and that the content can be easily understood by all
- improving capability by introducing roles to provide support and accelerate the embedding of best practice principles

Combined, these activities will improve our risk maturity overall.

In preparation for a new enterprise-wide risk management platform, we introduced an interim solution for recording business risks. This improves access and version control, increases cross-directorate visibility and provides a consistent template for recording and reporting business risks. Project and programme risks are currently recorded separately but follow the same principles which underpin our enterprise-wide risk management framework.

During the year, the Board and our Executive team reviewed the roles and responsibilities of key parties across our organisation, endorsed our risk appetite framework and agreed the alignment of our principal risks to the most appropriate governance forum. This ensured that decisions were made in full knowledge of the relevant risks and provided the Board with greater oversight of risk management in practice across our company.

In-year movement

Our investment in enhancement schemes requires appropriate internal and external scrutiny to ensure we deliver value and provide benefit to our customers, stakeholders, local communities and the wider economy. Delays in obtaining planning consents, known as DCOs, can impact our ability to deliver successfully and reduce our ability to fulfil our *Delivery plan* in full.

In 2021, the Board recognised that the volume of DCOs required for second road period schemes had significantly increased, which, if delayed, could jeopardise delivery success and impact on future investment strategies. This led to a secondary risk, focused on DCO delivery, being escalated to our principal risk register and monitored at Board level.

While we were confident that our governance framework and controls were effective in providing an early warning of potential issues, during 2022–23 the risk began to materialise. To minimise its impact, our Executive, together with DfT, implemented a series of additional actions which successfully managed the risk back to its original level. By year-end, the Board was satisfied that the new risk management strategy was managing the risk consistently and agreed to cascade it back to secondary level to be managed by the business.

Economic crime

Economic crime, which covers fraud, theft, bribery, corruption, money laundering and modern slavery, is a serious and often underestimated corporate problem. National Highways, like many other public and private sector organisations, is not immune to its effects and we believe that a failure to effectively guard against economic crime can undermine the trust that our stakeholders, customers and supply chain has in us.

These crimes, often committed by an individual or a group to obtain a financial or professional advantage, are estimated to cost the UK government as much as £52 billion. Any loss of this type is clearly unacceptable, which is why we have worked to understand our own vulnerabilities and ensure that we have strong controls in place to manage these risks.

Our company imperatives (safety, customer service and delivery) and our values (safety, ownership, passion, integrity and teamwork) underpin everything we do. They describe how we treat each other, how we want to be seen as an organisation and how we do business. In line with these, we require all our people to act honestly and with integrity, safeguarding the public funds for which we are responsible. All instances of economic crime are dealt with effectively, ethically and in accordance with the law. Our suite of policies, processes and procedures reflect and build on current legislative requirements. These should be understood by all our people, no matter what their role.

There is always more that we can do to learn and improve our approach. We work closely with DfT, who have recently aligned their own approach to the five principles for public sector fraud and corruption management as established by the International Public Sector Fraud Forum. We have adopted the same five principles. These form the basis of our own strategy, all of which underpins our primary goal of prevention. In setting this strategy, we are sending a clear message to those who are willing to act against us that we are vigilant to the fact that fraud will always exist but that we will do everything we can to prevent it.

In-year activity

In December, as part of embedding our counter-fraud approach, we launched an external and independent ‘Speak up’ facility, hosted by a specialist whistleblowing provider, OneTrust. Anyone can contact us through either the following link Speak Up – National Highways or by telephone: 0808 189 1053 (24 hours). We take all concerns seriously and believe that this new service will make it easier for internal and external referrers to raise concerns.

This year, we received 68 new referrals, an increase on the 49 referrals received last year. We consider the rise in referrals to be a combination of an increase in general awareness around all aspects of economic crime, together with our publicity surrounding the new whistleblowing reporting arrangements. We are confident that the mechanisms to report concerns are working and that the number received is an accurate reflection of current circumstances. Our Business Ethics Committee and the Audit and Risk Committee receive quarterly reports on the work of our Counter-fraud Team. This includes the results of all investigations completed and recommendations for future prevention agreed by the business.

All referrals are investigated in line with our policies. As in previous years, this year we investigated several large and complex referrals relating to our supply chain. In most cases, the referrals were reported by individuals from within our supply chain, a trend that began to emerge last year. This indicates external confidence that we will take allegations seriously and investigate them thoroughly. Although no cases of economic crime were proven, we have established patterns of behaviour that have the potential to raise our economic crime risk exposure, not least subcontracting practices within the different tiers of our supply chain. As a result of our investigation work, we have agreed, and followed up on, several improvement actions to strengthen compliance and oversight across our contract management activity.

We rely on our supply chain to manage economic crime risk. To strengthen our understanding of their approach, this year we wrote out to all our Tier 1 suppliers asking for copies of their economic crime policies, processes and evidence to support compliance. Submissions were reviewed against best practice principles, and we will use the results to enhance general practices in this area.

In-year, we refreshed all our economic crime policies, procedures and our *Counter-fraud strategy*, adopting the International Public Sector Fraud Forum's five principles for public sector fraud and corruption management. This helped fully align our approach with Cabinet Office requirements contained within the government functional standard 'GovS 013'. Once again, our annual self-assessment confirmed that we are fully compliant in all aspects of the standard.

Modern slavery

We support government's objectives to eradicate modern slavery and human trafficking. We recognise the significant role that we play in both combating it and supporting victims.

We are committed to ensuring our supply chain and business activities are free from abuses to ethical and labour standards. For more information, please see our *National Highways anti-slavery and human trafficking statement, published on our website*.

Our future viability

The Board has assessed the viability of our company, using the five-year road period starting from 1 April 2020 and our position within it (to March 2025) as a basis for that assessment.

At the start of each road period, the Board assesses our viability using the full five-year period as the basis for this evaluation. On an annual basis, and as we progress through the road period, the Board considers the impact that government funding, our business plan, our risk management framework and our principal risks have on the company's ability to continue in operation.

Funding

We are funded from the public purse by grants-in-aid from DfT. Before the start of each road period, we work closely with our colleagues at DfT and ORR to determine our outputs and provide a high degree of certainty over our capital and resource funding. This is detailed in the *Statement of funds available* and set out in government's annual resource delegated expenditure limit.

Our funding for this road period is provided through the National Roads Fund, which reserves the revenues of Vehicle Excise Duty within England for road investment. As a DfT-owned company, our creditors can rely on government security, and the statutory obligations of the Secretary of State for Transport, to settle any liabilities due.

At the beginning of each road period, the Board considers five years to be an appropriate timeframe for assessment, given the certainty of our funding settlement. As we progress through the road period, and particularly as we reach the last two years of the cycle, this assessment will look beyond the current period to consider government's future commitment to invest in the SRN.

In March 2020, government published *Road investment strategy 2: 2020-2025 (RIS2)*, setting out their strategic vision for the SRN and how money will be invested to operate, maintain, renew and improve our network. The *Statement of funds available* detailed £27.4 billion of capital and resource funding to meet our commitments across the second road period. This was reduced to £24 billion as part of the *Spending review 2021* settlement. As we approach year four of the second road period, the Board has also considered the ongoing funding negotiations for the third road period as an indication of government's commitment to invest post-2025.

Planning

For each road period, we prepare a *Strategic business plan* and a five-year *Delivery plan*. Together, these explain how we will deliver our strategic outcomes, measure our success and identify our future improvement plans. We published these documents in August 2020.

Our performance is monitored by the ORR on a quarterly basis, and we refresh and publish an annual *Delivery plan update*. We use our plans, budgets and related financial models to project cash flows, monitor financial risks and our liquidity position and forecast future funding requirements relevant to our Licence.

Principal risks

Linked to our ability to meet our strategic objectives, we identify our principal risks (pages 184 to 199) through robust assessment. This includes a continuous cycle of reporting and review at all levels of our business.

We analyse our company's resilience to the potential impact of these risks, based on:

- the effectiveness of mitigating actions and controls to reduce either likelihood or impact
- the Board's conclusions from its regular monitoring and review of risk management and internal control systems, as described on pages 246 to 251.

The Board considers the extent of credit risk, liquidity risk and market risk that our company faces is low due to the nature of our activities. More information can be found in note 10 of the financial statements section on page 350.

They also consider our company's ability to withstand the following severe yet plausible scenarios, shown on the right.

These scenarios cover all our principal risks and were considered in terms of the impact on our three imperatives and our ability to deliver our second road period commitments.

Based on this assessment, the Board is content that we have appropriate arrangements in place to minimise the impact of these scenarios and can ensure our company's resilience.

As such, the Board has a reasonable expectation that our company will continue in operation and meet its liabilities as they fall due over the period to March 2025. The Board will be able to consider viability beyond March 2025 once our third road period (2025–30) funding settlement is agreed.

"Our performance is monitored by the ORR on a quarterly basis, and we refresh and publish an annual *Delivery plan update*. We use our plans, budgets and related financial models to project cash flows, monitor financial risks and our liquidity position and forecast future funding requirements relevant to our Licence."

The *Statement of funds available* detailed

£27.4 billion

of capital and resource funding to meet our commitments across the second road period

This was reduced to

£24 billion

as part of the *Spending review 2021* settlement.

Imperative	Scenario	Link to our principal risks
Safety	A significant safety event occurs on our network which leads to injuries and fatalities to our people, road workers or road users.	**Safety risk 5:** Ineffective control over safety, health and wellbeing threats may lead to staff and road workers being harmed physically or mentally. **Safety risk 6:** A major asset failure on the network may lead to multiple deaths, injury, damage to vehicles or property and loss of service on the network. **Delivery risk 7:** Inability to respond, maintain and recover technical outages within agreed availability targets may lead to operational and corporate impacts, as well as safety consequences and reputational damage.
Imperative	**Scenario**	**Link to our principal risks**
Customer	A significant adverse event occurs, which disrupts the operation of our network or undermines the public's confidence in our company.	**Customer services risk 3:** Public concerns of smart motorway safety performance may lead to increased stakeholder scrutiny, which deflects attention away from other RIS2 deliverables. **Customer services risk 4:** High-profile criticism, erosion of stakeholder or customer trust or confidence may lead to increased costs or delays to the delivery of our RIS2 business plan or

Imperative	Scenario	Link to our principal risks
		revocation of our Licence to operate. **Customer services risk 10:** Failure to listen, influence or respond to our customers effectively may erode their confidence in our ability to operate as the strategic highways authority. **Delivery risk 2:** An impact on either the confidentiality, integrity or availability of our critical services, systems or assets that could lead to significant business interruption or a failure to manage our network or the business effectively, impacting on safety and reputation. **Delivery risk 7:** Inability to respond, maintain and recover technical outages within agreed availability targets may lead to operational and corporate impacts, as well as safety consequences and reputational damage. **Delivery risk 8:** Failure to deliver in an increasingly complex environment may lead to significant erosion of stakeholder and customer trust to deliver, thereby negatively impacting our future investment settlement.
Imperative	**Scenario**	**Link to our principal risks**
Delivery	We are unable to deliver planned enhancements to the SRN due to ineffective planning or management.	**Customer services risk 3:** Public concerns of smart motorway safety performance may lead to increased stakeholder scrutiny, which deflects attention away from other RIS2 deliverables. **Delivery risk 2:** An impact on either the confidentiality, integrity or availability of our critical services, systems or assets that could lead to significant business interruption or a failure to manage our network or the business effectively, impacting on safety and reputation.

Imperative	Scenario	Link to our principal risks
		Delivery risk 7: Inability to respond, maintain and recover technical outages within agreed availability targets may lead to operational and corporate impacts, as well as safety consequences and reputational damage. **Delivery risk 8:** Failure to deliver in an increasingly complex environment may lead to significant erosion of stakeholder and customer trust to deliver, thereby negatively impacting our future investment settlement. **Delivery risk 9:** We underestimate the scale or pace of change required to meet government environmental targets, which may lead to irreparable or long-term harm to the environment or significant environment-related adverse health impacts on people. **Delivery risk 11:** A misalignment between the required and available capability or capacity of our supply chain may mean that we deliver a less efficient or lower quality outcome, leading to a reduced ability to deliver the RIS outputs and associated benefits. **Delivery risk 12:** We are unable to recruit and retain suitable and capable senior or specialist staff, which may lead to a reduced ability to deliver our strategic objectives as a high-performing organisation.

Governance at a glance

The Board is accountable to our Shareholder for all aspects of our activities and performance. It is responsible for ensuring the long-term success of our company.

An effective Board

The Board is our primary governance arm and maintains the highest standards of governance to effectively deliver our strategy. The Board takes decisions to create sustainable long-term value for the benefit of our Shareholder, our customers, our people and our supply chain.

The operation of the Board is supported by the collective experience of our Directors. This enables the Board to reach decisions in a focused and balanced way, guided by independent thought and constructive debate between members. The Board supports open and honest conversations which, in turn, ensure decisions are made for the long-term benefit of our company in full consideration of the impact on all stakeholders.

"The Board is our primary governance arm and maintains the highest standards of governance to effectively deliver our strategy."

Governance statement

The Infrastructure Act 2015 created Highways England as a government-owned company. The Secretary of State for Transport then appointed and licensed us as a strategic highways company from 1 April 2015. We manage and improve England's motorways and major A-roads, known as the SRN, to make journeys safer, smoother and more reliable. On 8 September 2021, we changed our name from Highways England to National Highways.

We are held to account by Transport Focus and ORR, who provide independent advice to the Secretary of State for Transport on our activities.

Section 172 statement

s172 Directors' Duties

The Directors have regard to the interests of our company's employees and other stakeholders, including the impact of our activities on the community, environment and our company's reputation, when making decisions. The Directors, acting fairly and in good faith, consider what is most likely to promote the success of our company in the long term.

[Charts showing our Board highlights]

Board changes during the year

- Alan Cumming stepped down from the Board on 29 April 2022
- Diego Oliva joined the Board on 1 July 2022
- Roger Lowe stepped down from the Board on 10 July 2022
- Simon Blanchflower joined the Board on 1 March 2023
- Carolyn Battersby stepped down from the Board on 31 March 2023

Governance structure

[Diagram showing our Governance structure]

The Infrastructure Act 2015 sets out our overall governance framework, including our Licence agreement and the *Road investment strategy*.

Framework document

DfT's *Framework document* sets out the overall framework within which we operate, how we will interact with the Secretary of State for Transport and respective roles and responsibilities. It also sets out how our governance and decision-making responsibilities are exercised in the context of a public sector body and the responsibilities placed on our company's Accounting Officer.

***Licence* agreement**

Our Licence sets out direction and guidance on how we must act, as well as the process for setting and changing the *Road investment strategy*.

Delivery plan 2020–25

Our *Delivery plan 2020–25* provides the detail of specific funding, activities and projects we will deliver over the second road period. The Board reviews the plan annually and agrees refinements to reflect changes to our portfolio or to meet our Shareholder's priorities. We publish these in an annual *Delivery plan update*, which describes the programme for the year ahead.

The Board

The Board's role is to ensure our company's long-term, sustainable success and set the overall strategy and direction. The Board is accountable to our Shareholder for all aspects of our company's activities and performance, and has a responsibility to customers, our people, our supply chain and the wider communities we serve. The Board provides appropriate challenge to management and ensures our company maintains an effective risk management internal control system.

Committees

AR Audit and Risk Committee
I Investment Committee
N Nominations Committee
R Remuneration Committee
S Safety Committee
• Committee Chair

Dipesh Shah OBE

N R

Chairman

- Appointed in September 2020
- Investment Committee Chairman for the 2020 European Fund for Energy, Climate Change and Infrastructure, and also for Marguerite II Fund, as well as Non-Executive Board Director at Canaccord Genuity Group Inc.
- Formerly CEO of the UK Atomic Energy Authority and of large businesses in BP
- Former Chairman of, among others, a FTSE-listed power utility, the European industry association for solar, a housing association and a private equity fund for renewables
- Served on the boards of Babcock International Group Plc, Lloyd's of London, The Crown Estate and Thames Water, and was a former member of government's Renewable Energy Advisory Committee
- Graduate of: University of London; University of Warwick; and the Harvard Business School management programme

Nick Harris
AR I N R S

Chief Executive

- Appointed permanent Chief Executive in September 2021
- Responsible for the operational leadership of National Highways, including day-to-day operation of our network, customer service and maintenance services, and our company's five-year capital maintenance and renewals programme
- Career includes senior operational roles in water utilities across the UK and overseas
- Qualifications include CEng (Chartered Engineer) and MICE (Member of the Institute of Civil Engineers)

Vanessa Howlison
AR I S

Chief Financial Officer

- Appointed in June 2016
- Career includes Finance Director roles in government departments, including DfT, Department of Energy and Climate Change and Ofsted, and finance roles in the NHS and the Audit Commission
- Currently a member of The Chartered Institute of Public Finance and Accountancy (CIPFA) Institute Council
- Qualifications include CIPFA, and studying for an MSc in Carbon Management, University of Edinburgh

Carolyn Battersby
AR I N R

Non-Executive Director

- DfT-appointed Shareholder Representative from February 2019
- Currently Executive Director at UK Government Investments, which she joined in 2011
- Career in corporate finance and strategy, including roles at Tesco, The Prince's Trust, Schroders and Permira
- Qualifications include an MChem (Master of Chemistry) degree
- Carolyn stepped down from the Board on 31 March 2023

Janette Beinart

I N S

Non-Executive Director

- Appointed Non-Executive Director in January 2019
- Background in information technology, with a long international career working for Shell, culminating as Global Upstream Chief Information Officer
- Previous role in the savings and investment business as Interim Group Chief Information Officer for M&G Prudential
- Qualifications include a BA degree in Economics

Simon Blanchflower CBE

R S N

Non-Executive Director

- Appointed Non-Executive Director in March 2023
- Deputy Chair of the London Legacy Development Corporation, which is responsible for securing the legacy from the London 2012 Olympics, and chairs their Health, Safety & Security Committee and also their Investment Committee
- Non-Executive Director of the Ebbsfleet Development Corporation and the Global Centre of Rail Excellence
- Formerly Chief Executive Officer of the East West Railway Company (EWR)
- Background in the rail sector, with a long career leading the development and delivery of major rail infrastructure projects, including being the Major Programme Director on the Thameslink Programme
- Qualifications include a BSc Honours degree (1st class) in Civil Engineering and FICE (Fellow of the Institute of Civil Engineers)

Kathryn Cearns OBE

AR N R

Senior Independent Non-Executive Director

- Appointed Non-Executive Director in April 2018 and appointed Senior Independent Non-Executive Director in July 2022
- Member of DfT’s Group Audit and Risk Assurance Committee (GARAC) and (until July 2022) DfT Special Representative on the Elizabeth Line Committee (Crossrail)
- Non-Executive Board member at the Nuclear Decommissioning Authority, the Press Recognition Panel and the UK Endorsement Board
- Lay member and Vice Chair of the BMA Audit and Risk Committee, Vice Chair of The Property Ombudsman and Non-Executive Director and Chair of the Partner Board, Emperor Design Consultants Ltd
- Qualifications include FCA (Fellow Chartered Accountant) and FCCA (Fellow of the Association of Chartered Certified Accountants)

Lawrence Gosden

I N S

Non-Executive Director

- Appointed Non-Executive Director in April 2021
- Currently CEO at Southern Water, appointed 1 July 2022
- Career centred on asset management, capital delivery and operations, primarily in the utilities sector
- Qualifications include a BEng Honours degree in Civil Engineering

Diego Oliva
I S

Non-Executive Director

- Appointed Non-Executive Director in July 2022
- Co-founder and Chief Executive Officer of Glue, an Internet of Things company which connects physical devices to the internet to enable smart access and last-mile deliveries
- Also serves as Limited Partner at Earlybird, White Star Capital and Wamda Capital venture capital funds
- Background in the technology sector, with previous roles including Non-Executive Director at Just Eat, Regional Director of EMEA at Facebook and Founding Director of Tradedoubler
- Qualifications include: a Bachelor of Economics (Tec de Monterrey, Mexico); an MSc in Economics (Stockholm University); and a postgraduate programme in General Management (Harvard Business School)

Our Executive

Our Executive Directors support our Chief Executive in leading National Highways and delivering our company's strategy. They individually lead directorates to implement the Board's strategic decisions and manage risks.

Committees

B Attends the Board

[Charts showing Executive highlights of Gender, Tenure and Experience]

Nick Harris

B

Chief Executive
Read biography on page 209

Vanessa Howlison

B

Chief Financial Officer
Read biography on page 209

Nicola Bell MBE

Executive Director, Major Projects

- Appointed in December 2022
- Responsible for leading the delivery of major enhancement schemes as part of government's *Road investment strategy*
- Has held a wide variety of roles in the Highways and Transport sector, including Director of Highways and Transport in local government, and Asset Management Director and Regional Operations Director for the South East of England at National Highways
- Qualifications in Civil Engineering and an MSc in Transport Planning and Engineering

- Awarded an MBE for services to transport

Elaine Billington MBE

Executive Director, Human Resources and Organisational Development

- Appointed in September 2019
- Responsible for developing and leading our *People strategy*, including building a diverse, capable and engaged workforce, developing effective leaders and creating a high-performing culture underpinned by our values
- Career includes senior roles at United Utilities plc, including HR Director, and various roles at VERTEX, Cable & Wireless Communications and Rentokil Initial
- Qualifications include FCIPD (Fellow of the Chartered Institute of Personnel and Development)
- Awarded an MBE for services to early careers and apprenticeships

Malcolm Dare

Executive Director, Commercial and Procurement

- Appointed in January 2019
- Responsible for our Commercial and Procurement directorate, with particular focus on: employee development and professional qualifications; the strategy and implementation of acquisition programmes; strategic sourcing, supply chain development and supplier relationships and performance; cross-functional efficiency and cost-reduction activities; and social value strategy
- Career includes: Chief Procurement Officer at Thales UK; Supply Chain Director at BAE Systems Submarines; and other roles across the FMCG, Technology and Engineering industries
- Qualifications include an MBA and FCIPS (Fellow of the Chartered Institute of Procurement and Supply)

Matt Palmer

Executive Director, Lower Thames Crossing

- Appointed in July 2020
- Responsible for the A122 Lower Thames Crossing project, one of the most ambitious road projects ever undertaken in the country
- Career includes over 30 years' experience in leadership roles across design, project and programme management for a range of major organisations and programmes, both in the UK and internationally
- Qualifications include CEng (Chartered Engineer) and MICE (Member of the Institute of Civil Engineers)

Richard Pedley

Chief Digital and Information Officer

- Appointed in December 2022
- Responsible for the provision and operation of our operational and business information technology, data strategy and cyber and information security
- Career includes technical consulting and technology transformational leadership roles across multiple sectors, including with Microsoft, Severn Trent Water, Aviva, Capita, Environment Agency and latterly National Grid
- Qualifications include Geographical Information Systems Management (School of Military Survey, Royal Engineers)

Tim Reardon

B

General Counsel

- Appointed in March 2015
- Responsible for the in-house Legal and Company Secretariat teams and for providing advice to our Executive and the Board on the full range of legal issues, including: commercial and procurement; planning; highways law; and health and safety
- Career includes roles at: British Railways Board; Clifford Chance; the Strategic Rail Authority; and DfT
- Tim was called to the Bar in 1981, and admitted as a Solicitor in 1996

Elliot Shaw

Chief Customer and Strategy Officer

- Appointed in September 2016
- Responsible for the strategic development of our network, our organisational transformation agenda, our analytical and economist functions, our relationships with key statutory and regulatory bodies, our customer service and our communications and corporate affairs activities
- Career includes Transformation Director at the Ministry of Justice and a number of Senior Civil Service positions at the Ministry of Justice and DfT, with his early career spent as a management consultant at Accenture
- Qualifications include: a BA in Economics and Politics; a Masters in Public Administration (MPA) from Harvard University; and FCIHT (Fellow of the Chartered Institute of Highways and Transportation)

Duncan Smith

Executive Director, Operations

- Appointed in October 2021
- Responsible for the operational leadership of our organisation, including day-to-day operation of our network, customer service and maintenance services, and our company’s five-year capital maintenance and renewals programme
- Career includes operational leadership roles within the UK and US water industries, and previous positions as Transformation Director and Regional Operations Director at National Highways
- Qualifications include CEng (Chartered Engineer) and MICE (Member of the Institute of Civil Engineers)

Mike Wilson

B

Chief Highways Engineer

- Appointed in April 2014 (joined Highways Agency in September 1991)
- Responsible for our technical requirements and providing technical assurance, advice and change management
- Leads on health, safety and wellbeing, environment and sustainability, asset management and designated funds
- Previous roles at National Highways include Regional Divisional Director for the South West
- Qualifications include: a BEng (Hons); CEng (Chartered Engineer); FICE (Fellow of the Institute of Civil Engineers); and FCIHT (Fellow of Chartered Institution of Highways and Transportation)

Corporate governance report

In this section

Compliance with the UK Corporate Governance Code 2018 (the Code)

Our company is expected to comply with the Code or specify and explain any non-compliance in this document. We believe that adopting the principles of the Code is a way of recognising and embedding best practice in corporate governance.

The Board considers that, for the financial year ending 31 March 2023, National Highways was fully compliant with the Code, except for the following four areas it could not comply with:

1 **Board leadership and company purpose provision 3:**
This requires our company to maintain a dialogue with its shareholders, based on a mutual understanding of objectives. We have built and maintained our relationship with our Shareholder, the Secretary of State for Transport, with frequent contact with DfT as his representative. The Board recognises that this sits outside of the corporate governance norms contained within the Code.
2 **Board leadership and company purpose provision 4:**
This provision is not applicable to us, because the Secretary of State is our company's sole Shareholder.
3 **Succession and evaluation provision 18:**
This provision is not applicable to our company because all Non-Executive Director appointments, extensions and terminations are confirmed by the Secretary of State as our company's sole Shareholder.
4 **Audit risk and internal control provision 36:**
This provision is not applicable to our company because Executive Directors do not receive any form of company equity or cash payments based on equity values as part of their remuneration.

Fair, balanced and understandable (FBU) reporting

At the request of the Board, the Audit and Risk Committee has considered whether, in its opinion, this *Annual report and accounts*, taken as a whole, is fair, balanced and understandable. The committee has also considered whether it provides the information necessary to assess our company's position, performance, business model and strategy.

The process below was followed by the committee in making its assessment:

1 Regular Audit and Risk Committee review

The committee reviewed the *Annual report and accounts* at an early stage, as well as throughout the process, to enable sufficient time for comment and review and to ensure overall balance and consistency.

2 Internal Audit verification and oversight

Internal Audit reviewed the *Annual report and accounts* and reported back to the committee on its assessment and findings.

3 FBU Assessment

The committee reviewed and approved the process in place to support the FBU assessment and reviewed the findings of this process. The committee was satisfied that all the key events and issues reported to the Board by management (both positive and negative) had been adequately referenced or reflected within the *Annual report and accounts*.

4 External Auditor review

The National Audit Office, as External Auditor, presented the results of its audit work. The significant issues noted by management were consistent with those identified by the National Audit Office in their report.

5 Recommendation to Board

The Board approved the committee's recommendation that the FBU statement could be made, which can be found in the Directors' Responsibility Statement on page 180 of this report.

Board leadership and company purpose

Overview

The Board is accountable to our Shareholder for all aspects of our activities and performance and is responsible for ensuring the long-term success of our company.

The requirements of the Board are documented in our *Articles of association*, *Schedule of matters reserved for the Board and Framework document*.

As at 31 March 2023, the Board was made up of:

- the Chairman (who was independent on appointment)
- five Non-Executive Directors
- two Executive Directors

The details of their career backgrounds, relevant skills, committee memberships, tenure and external appointments can be found within their individual biographies on page 208. Further details on the role of the Chairman and members of the Board can be found in the following pages.

The Board recognises the importance of considering all stakeholders in its decision-making, as set out in s172 of the Companies Act 2006 and the reporting legislation around stakeholder engagement.

The Directors are entitled to require from our company all information they may reasonably request so they can perform their duties as Directors. This includes advice from an independent adviser at our company's expense if required.

The work of the Board

The majority of Board meetings held during the year were face-to-face. Most committee meetings were held virtually. During the year, the Board held one meeting at a venue in Cheltenham near to the A417 Missing Link scheme. The Directors toured the site to improve their understanding of the scheme and how it will help improve that part of our network and our broader relationship with key stakeholders. The Board also held meetings at our regional offices in Birmingham and Basingstoke.

In Board decision-making, the relevance of any particular stakeholder group may vary depending on the subject. The Board seeks to understand the needs of each stakeholder group and Board papers demonstrate that stakeholder considerations have been taken into account as part of the decision-making process.

Some of the Board's work is delegated to the committees of the Board. At Board meetings, the chairs of each committee provide updates on activities from their committee's last meeting.

- **Safety Committee:** The safety of our people, supply chain and customers is paramount. The committee has a key role in monitoring safety performance and supporting a safety culture of improvement. Further information on the work of this committee can be found on page 240.
- **Investment Committee:** The Board delegates capital investment decisions to this committee, which monitors progress in delivering our capital programme to ensure good governance and value for money. It bases its decisions on our Executive Investment Decision Committee's recommendations. Further information on the work of the Investment Committee can be found on page 257.
- **Audit and Risk Committee:** The committee plays a key role in providing oversight of financial reporting, risk management, internal controls (including internal audit) and managing the relationship with the National Audit Office, our external auditor. Further information on the work of this committee can be found on page 246.
- **Remuneration and Nominations Committees:** Our capacity and capability are integral to our ability to deliver current and future investment strategies. The Board monitors progress on recruitment, retention and reward through its Remuneration Committee and Nominations Committee. Further information on the work of both committees can be found on page 244 (Nominations) and page 261 (Remuneration).

On behalf of the Board, the Shareholder Representative Non-Executive Director became the Board lead on employee engagement in July 2022. During the year, she met with our people based at the Northwest and West Midlands regional control centres in Newton-le-Willows and Quinton respectively, and our Bedford office. Each session was interactive and provided an opportunity for questions and answers directly with our people. Feedback from each session was given to the Board.

The Board was encouraged by the results of our employee engagement survey undertaken during the year. The results showed an overall engagement score of 67%, an increase of 2% on last year and a continuation of the upward trajectory of improvement. The Board was pleased to note the high scores in the wellbeing and diversity and inclusion survey categories.

The Board approved for publication the company's performance against its KPIs and other performance indicators.

The adjacent chart shows how the Board allocated its time in 2022–23.

[Charts]

Board attendance

Board and committee attendance

	Dipesh Shah	Roger Lowe	Alan Cumming	Kathryn Cearns	Janette Beinart	Carolyn Battersby	Lawrence Gosden	Diego Oliva	Simon Blanchflower	Nick Harris	Vanessa Howlison
Board[1] (Chair: Dipesh Shah)	10/10	1/4	1/1	10/10	9/10	10/10	9/10	7/7	1/1	10/10	10/10
Audit and Risk (Chair: Kathryn Cearns)	N/A	1/2	N/A	5/5	N/A	5/5	N/A	N/A	N/A	4/5[4]	5/5[4]
Nominations (Chair: Dipesh Shah)	3/3	1/1	1/1	3/3	3/3	3/3	3/3	1/2	N/A	3/3[4]	N/A
Remuneration[1] (Chair: Roger Lowe/ Kathryn Cearns)	5/5	1/2	N/A	5/5[5]	N/A	5/5	2/2[2]	N/A	1/1	5/5[4]	N/A
Safety (Chair: Alan Cumming/ Lawrence Gosden)	6/6[4]	N/A	1/1	4/5[3]	4/6	1/1[4]	6/6	N/A	1/1	6/6	6/6
Investment[1] (Chair: Janette Beinart)	N/A	N/A	0/1	N/A	5/5	5/5	2/5	2/2	N/A	5/5	5/5

Committee changes in the year

1 In addition to the scheduled meetings outlined to the left, there was one additional special business Board meeting, two additional ad hoc Remuneration Committee meetings and one additional ad hoc Investment Committee meeting held during the year. Attendance at these meetings was based on availability at the time.

2 Lawrence Gosden stepped down from the Remuneration Committee in April 2022.

3 Kathryn Cearns stepped down from the Safety Committee in January 2023.

4 Not a committee member – in attendance only.

5 Kathryn Cearns became Interim Chair of the Remuneration Committee from June 2022.

Key topics discussed at Board meetings

The key activities considered by the Board during the year are set out opposite. The Board has maintained its focus on our three imperatives: safety, customer service and delivery. Board meeting discussions are structured using tailored agendas that have been agreed in advance by the Chairman, in conjunction with the Chief Executive and Company Secretary. A typical Board meeting has the following elements:

- Items requiring approval, such as company policies, Board committee terms of reference and investment approvals outside the cycle of Investment Committee meetings
- Performance reports from the Chief Executive and CFO
- Legal updates containing briefing material and information relating to planning and project issues, operations and legislation, disputes and litigation matters, employment and commercial and procurement matters
- Strategic themes, performance and delivery items, operational development and capability items and reputational themes

We have set out some of the key topics discussed at Board meetings during the year:

Standing items	Link to principal risks
Chief Executive report A monthly overview of the key activities for: safety; customer service; communities; operations; capital delivery and supply chain; and government and regulatory matters.	**1 13 6**
Chief Financial Officer report Monthly updates on capital and operational expenditure and pay controls.	
Legal report Monthly updates on key legal issues.	
Strategic engagement report Regular updates on key issues in public affairs and the media, and our communication activities.	

Strategic themes	Link to principal risks
Smart motorways Updates on a variety of aspects relating to our approach to smart motorways and the actions from government's smart motorways stocktake.	**11 12**
Planning for the third road period Updates and requests for advice on the development of the *SRN Initial report* and proposals for the third road period programme.	
Board and Executive strategy days See further information on page 226.	
Designated funds Update on programme progress and plans.	
National Highways *Framework document* Input to the revised *Framework document*.	

Performance and delivery items	Link to principal risks
Health, safety and wellbeing Updates from the Chair of the Safety Committee and updates on progress against our *Home safe and well* approach.	**2 3 4 5 7 9 10**
Our people Updates from the Chair of the Remuneration Committee and updates on the delivery of our *People strategy*.	
Operational technology performance Updates on key operational technology programmes, including CHARM and stopped vehicle detection.	
Digital services and cyber security Updates on digital services and the cyber security improvement programme.	
Customer service strategy Review of our refreshed strategy.	

Net zero/corporate carbon Progress updates on the implementation of our carbon strategy: *Net zero highways: our 2030, 2040 and 2050 plan*	
Environment Bill Update on the potential implications of the Environment Bill for our company.	
A122 Lower Thames Crossing and A303 Stonehenge Tunnel schemes Updates on the above schemes.	
DCO delays Update on the current situation and our company's response to it.	
Public sector equality duty Updates on the EDI aims and objectives of our company.	

Financial and risk items	Link to principal risks
Business plan Updates on, and requests for input into, our company's annual business planning cycle.	8
Monthly performance updates, including on KPIs Regular updates on our company's performance against our KPIs.	
Annual report and accounts Input into the development of our company's *Annual report and accounts*.	
Corporate risk register Requests for input into regular refreshes of our company's corporate risk register.	

Strategy day and workshops

The Board and our Executive team held a number of workshops and a strategy day during the year. The Board found each session beneficial as they allowed for in-depth, joint discussions with our Executive team on a number of strategically-important topics. This helped ensure that the development and delivery of key strategies and activities remain aligned to our imperatives and strategic aims.

All lane running workshops

A series of sessions were held during the year to discuss matters related to all lane running motorways. These included: safety, legal, operational technology and governance considerations; the Transport Select Committee's response; the emergency area retrofit programme; opening schemes in construction; and external communications. Discussions also included government plans in this area and how we should work with others.

RIS3 planning meetings

Several workshops were held during the year to agree key areas related to the third *Road investment strategy* (RIS3) including the overall narrative, financial planning and scenario setting, and items to discuss further with government. RIS3 was also discussed regularly at Board meetings throughout the year.

Strategy day

A strategy day was held which provided the Board and our Executive team with an opportunity to consider future trends and external developments likely to impact our organisation, our environment strategy and planning for the medium-term. The Roads Minister attended part of the meeting to give his view on government priorities.

Board engagement with stakeholders

The Board engages with key stakeholders to understand their views and to balance their interests. This is an essential part of gathering insight and monitoring our company's performance.

Communities

The Board receives monthly updates on community activities through our Chief Executive's report and our Chief Customer and Strategy Officer's strategic engagement report. The Investment Committee considers the impact of investment proposals on communities on behalf of the Board.

Regular updates are also provided to the Board on the performance of our Designated Funds programme, the work of which positively impacts communities across the country.

Customers

The Board receives regular customer service updates and regular updates on technological innovations that benefit customers.

The Board met the Transport Focus Chair and Chief Executive during the year to discuss the two organisations' ongoing relationship and specifically customer service-related matters. Our Chairman and Chief Executive also attended a Transport Focus Board meeting and met regularly throughout the year with their counterparts at Transport Focus.

Safety measures are considered by the Safety Committee on behalf of the Board.

Our people

The Board receives quarterly reports from the Executive Director of Human Resources and Organisational Development on people-related topics and reviews the results of the employee engagement survey. The Shareholder Representative Non-Executive Director acted as the lead Director for employee engagement.

Supply chain

The Board receives regular updates from the Executive Director for Commercial and Procurement on supply chain activity. The Investment Committee oversees the performance of our company's major programmes on the Board's behalf. This includes the: Complex Infrastructure Programme; Smart Motorways Programme; Regional Delivery Partnerships; Asset Delivery; and Smart Motorway Alliance.

Statutory stakeholders

Statutory stakeholders include DfT, ORR, National Audit Office and Transport Focus, among others.

Our Chief Executive, Executive team members, Chairman and Board members meet with Ministers and senior DfT officials regularly throughout the year. The Chair and Chief Executive of ORR attended a Board meeting during the year to outline the key messages from ORR's annual assessment of our company's performance.

Regular updates are provided to the Board on company interactions with government, ORR and Transport Focus at a senior level.

"The Board receives monthly updates on community activities through our Chief Executive's report and our Chief Customer and Strategy Officer's strategic engagement report. The Investment Committee considers the impact of investment proposals on communities on behalf of the Board."

Composition, succession and evaluation

Composition

The composition of the Board and its committees can be found on pages 229 to 237. Attendance at Board meetings can be found on page 223.

Regular attendees include the General Counsel, Chief Engineer and Company Secretary, with other Executive team members and senior leaders joining from time to time on specific items of business.

The Company Secretary is responsible for ensuring the Board operates in line with our governance framework. He manages the flow of information to and from the Board, its committees and our Executive team. Directors have unlimited access to the advice and services of the Company Secretary.

Succession

Board changes during the year

Chronologically, Alan Cumming stepped down from the Board on 29 April 2022; Diego Oliva joined the Board on 1 July 2022; Roger Lowe stepped down from the Board on 10 July 2022; Simon Blanchflower joined the Board on 1 March 2023; and Carolyn Battersby stepped down from the Board on 31 March 2023.

Board induction

A detailed, tailored induction programme for each new Director is offered based on their needs and requirements and includes one-to-one meetings with the Chairman and each existing Non-Executive Director. One-to-one meetings are also arranged with the Chief Executive, CFO and other members of our Executive team and the Company Secretary. New Directors also meet members of the operational teams and are given opportunities to visit key sites, attend traffic officer ride-outs and visit regional control centres. These provide an opportunity through the induction process for the new Director to gain first-hand experience of our business and our culture. New Directors are also provided with opportunities to meet DfT officials and ministers.

The Company Secretary also provides an induction pack which contains a set of useful reference documents and background reading. Each new Director is provided with a briefing on the key duties of being a Director by the Company Secretary.

Induction of new Board members

The Board welcomed Diego Oliva and Simon Blanchflower during the year. Their induction programme was tailored to their needs and covered a range of areas across the business. These included:

- the provision of key corporate, strategic and financial documents
- one-to-one meetings with Executives and senior leaders
- site and safety tours
- ride-outs with traffic officers on our network
- meetings with stakeholders

Evaluation

Our annual Board evaluation provides the Board and its committees with an opportunity to consider and reflect on the quality and effectiveness of its decision-making and the range and level of discussion. It also provides the opportunity for each member to consider their own contribution at meetings and overall performance.

This year’s review was facilitated by the Company Secretary, who is well placed to conduct the process as an independent sounding board. A questionnaire, which drew on the themes from the externally-facilitated evaluation held in 2022, was designed and then circulated to Directors to complete. The subsequent responses were analysed by the Company Secretary, grouped into themes and shared with the Chairman on an anonymised basis. Identified actions were shared with the Board for consideration and taken forward.

Externally-facilitated evaluations were conducted by an independent board evaluation firm in 2021 and 2022. The next externally-facilitated evaluation will be scheduled in accordance with the Code to undertake an externally-facilitated Board evaluation at least every three years.

2022 external evaluation

The evaluation was conducted by an independent external board evaluation firm, Socia Limited. The evaluation concluded that the governance arrangements at National Highways met the requirements of the Code. It also concluded that the Board was operating effectively. The evaluation confirmed that progress had been made within the recommended focus areas identified in that review:

Balance of the Board agenda	Board agendas were improved through a restructure which divided the agenda into four sections: performance and delivery; reputation; organisation and capability; and specific strategic topics.
Duplication of business	There was evidence of a more streamlined process and the reduction of duplication. Board papers have improved but more work was needed to reduce the size of Board packs and to give feedback to authors of papers to drive consistency.
Relationship between the Board and our Executive team	Some progress was made but more was needed around engagement, transparency and clearer dialogue. DfT was pleased with the recent changes to their relationship with our Executive team and the Board Chairman, and engaged further with the Non-Executive Directors to improve communication and collaboration between all parties in the governance system. Three ways to improve the effectiveness of collaboration were identified as: building relationships internally and externally; handling conflict in a healthy manner; and sharing control. The recommendations for action included: strengthening relationships and building trust across the governance system; understanding roles and accountabilities on the Board; and getting more value from Board meetings.

2023 internal valuation

The internal evaluation process was conducted by the Company Secretary.

Progress was made against the recommended focus areas identified in last year's independent external evaluation. The internal evaluation involved the development of a questionnaire to be completed by Directors and analysed by the Company Secretary. An anonymised copy of the findings was discussed with the Chairman.

The evaluation identified four areas for increased focus in 2023–24:

1. Strengthen engagement with stakeholders outside the statutory stakeholder group
2. Include updates on the transformation programme on Board agendas
3. Strengthen communications between the Board and Executive team
4. Strengthen the Board's succession plan

The next Board evaluation will be held in early 2024.

[Diagram showing the 2023 internal evaluation process]

Board diversity policy

Our organisational commitment to diversity

As an organisation, we work to offer an inspiring, open and inclusive environment in which people feel valued for who they are and the skills they bring. We want everyone to thrive and grow along the way with us, encouraged to work innovatively and trusted to succeed. We aim to embed EDI principles across all areas of our business, driving real change in how we work together.

We want to ensure that diversity, in its broadest sense, remains a significant feature of the Board. We believe a broad range of skills, backgrounds, knowledge and experience are key drivers of an effective Board. The Chairman leads the Board diversity agenda and sets measurable objectives (seen in the adjacent diagram) to improve diversity, bring different perspectives and stimulate debate.

As sole shareholder in National Highways, the Secretary of State also has specific shareholding responsibilities that include appointing the company Chair and any Shareholder Appointed Director, and approving other appointments of Directors made by the Board, and can do so in the context of the Government and Departmental diversity strategy.

Board diversity agenda items

Gender

Keep a level of at least 30% female Directors on the Board over the short to medium term

Pipeline

Encourage a broad range of senior individuals within our organisation to gain Board experience, helping create a pipeline of high-calibre candidates

Breadth

Consider candidates for Non-Executive Director roles from a wide pool, including those with little or no previous Board experience, or from social backgrounds which are not already represented on the Board

Diversity

Ensure Non-Executive Director ‘long lists’ are gender balanced and include candidates from ethnic minority communities

Best practice

Only engage executive search firms that have signed up to the voluntary code of conduct on gender diversity and best practice

Benchmark
Ensure our recruitment processes are inclusive by assessing them against suitable benchmarks, with our supply chain also meeting or working towards suitable benchmarks

Workforce
Actively engage with our people to gain insight and influence employee engagement through employee networks and groups, including trade unions

Sponsorship
Assign Executive sponsors to each formally-recognised employee network to enable two-way dialogue, and periodically rotate these sponsors to develop breadth of perspective

Committees
Ensure Board member representation on key committees, such as the Remuneration Committee and Nominations Committee, to enable diverse perspectives and influence decision-making

Training
Ensure all members of our Non-Executive, Executive and senior leadership teams complete unconscious bias training as part of their induction into their roles, as expected of our entire organisation

Attract
Attract a diverse range of candidates for any Board roles so that we see representation from other protected characteristic areas, such as disability and sexual orientation, in the candidates and in the make-up of the Board

Leadership
We expect all our leaders, from the Board through to our senior leadership team, to demonstrate inclusive leadership, aligned to our company’s values

Our committees

Division of responsibilities

As at 31 March 2023, the Board comprised the Chairman, five Non-Executive Directors and two Executive Directors.

Overview

The Board is expected to have no more than 10 and no fewer than five members, with a balance in favour of independent Non-Executive Directors.

There is a clear division of responsibilities between the roles of Chairman and Chief Executive, and they have regular discussions together outside Board meetings. The Chairman and Non-Executive Directors meet after each Board meeting without the Executive Directors to de-brief on the meeting and to discuss relevant topics in a less formal setting.

The Non-Executive Directors meet without the Chairman present at least once a year. In addition, individual Directors meet routinely outside Board meetings as part of each Director's contribution to the delivery of our company's strategy and review of the business.

The Board is confident that the Non-Executive Directors have sufficient time to meet their Board responsibilities.

Board and Executive committee framework

Board

Governance committees

Safety Committee

Oversight of our: safety ambition and leadership; strategy; performance review; and compliance

Audit and Risk Committee

Oversight of: financial and internal control; risk and governance; financial reporting; internal audit and assurance programme; and external audit

Investment Committee

Oversight of investments within delegated authority thresholds of £200 million to £500 million

Nominations Committee
Oversight of Board and Executive appointments

Remuneration Committee
Oversight of the remuneration framework, including performance-related pay and Board and senior pay decisions

Executive

Executive committees and Executive groups

Asset Management Steering Group
Oversight of our company's end-to-end asset management approach

Business Ethics Committee (previously the Anti-Economic Crime Group)
Oversight of systems, measures and a culture that counters the risk of economic crime to ensure appropriate security arrangements are in place, and providing authorisation for new sensitive investigations

Operational Technology Committee (previously the Digital Data and Technology Leadership Group)
Oversight of data improvement and assurance of quality of reporting and internal decisions to support our investment programme

Executive Customer Service Group
Oversight of the development of effective relationships with customers and communities

Executive Finance Committee
Planning, control and management of resources to support decision-making and delivery over the short, medium and long term

Executive Safety, Health, Environment and Quality Committee (previously the Executive Health and Safety Committee)
Oversight of: safety management and leadership; strategy development; performance monitoring; and compliance

Executive Transformation Committee
Leads and develops the company's transformation and change management agenda

Investment Decision Committee
Oversight of investments within delegated authority thresholds of £50 million to £200 million

Legal Affairs Sub-Committee
Decision-making body of last resort in the contract standardisation project

Quarterly Business Review
Leads and directs company performance through aligning accountability for business planning, controlling and managing company resources

Reward and Resourcing Executive
Workforce planning, including decisions under the remuneration framework

Executive committee review

A review of our Executive committee structure was undertaken during the year. The purpose of the review was to check our company's ability to direct and control our purpose, performance, people and processes, ensuring they are in line with Shareholder expectations, as well as being efficient and effective. The review also checked that our risk and governance frameworks were fit-for-purpose, helping us manage the business effectively.

As a result of the review, we broadened the remit of the Anti-Economic Crime Group to include matters previously considered by the Security and Business Continuity Group, which was subsequently dissolved. We also broadened the remit of the Executive, Health and Safety Committee to include environment and quality-related matters. The review also considered the membership of all of our Executive committees, checking they were right-sized and fit-for-purpose.

Division of responsibility

The job descriptions of each Director, including the Non-Executive Chairman and Chief Executive, and the division of responsibilities are clearly defined and agreed by the Board. The responsibilities of each of the Directors and the role of Company Secretary are summarised on the following page.

The Board

Leadership

Non-Executive Chairman

The Secretary of State for Transport appoints the Chairman. This is a non-executive and part-time role, with a minimum of 90 days per annum.

The Chairman leads the Board and is responsible for ensuring we conduct our affairs openly, transparently and with probity. He is also responsible for ensuring our policies and actions are appropriate to those of a government-owned company and that they support the objectives of the Secretary of State for Transport.

The Chairman sets agendas and, with the Company Secretary, ensures timely communication of information to the Board to support sound decision-making. He allows sufficient time in meetings for constructive and challenging discussions, seeking contributions from all Directors, and ensures that effective relationships exist between them. He is also responsible for overseeing the annual Board effectiveness evaluation process.

Chief Executive

Our Chief Executive has day-to-day responsibility for our performance, leading our Executive team and overseeing operations. Our Chief Executive develops and implements our company's strategy, as approved by the Board.

He sets the cultural tone of our organisation and facilitates an effective link between the business and the Board.

In compliance with government requirements, he is also the Accounting Officer responsible to Parliament for the stewardship of the public funds under our company's direction.

Chief Financial Officer

Our Chief Financial Officer is responsible for providing leadership and direction for, and oversight of, the financial, accounting, tax and capital activities of our company.

Executive Directors

The Secretary of State for Transport approves all Executive Director appointments to the Board. They support our Chief Executive in delivering our company's strategy, individually leading directorates to implement the Board's strategic decisions.

Independent oversight

Senior Independent Non-Executive Director

The Senior Independent Non-Executive Director, in addition to her other responsibilities as Non-Executive Director, provides a sounding board for the Chairman and supports the delivery of his objectives.

She also acts as an alternative contact for our Shareholder or Non-Executive Directors, should they have any unresolved concerns relating to the Chairman, Chief Executive or Chief Financial Officer.

She leads the appraisal of the Chairman’s performance with the Non-Executive Directors and plays a key role in Board succession planning.

Independent Non-Executive Directors

The Secretary of State for Transport approves all Non-Executive Director appointments. As our Shareholder, he also appoints a further Non-Executive Director as his representative.

The Non-Executive Directors bring valuable independent expertise and external experience to the Board. They assist and provide challenge in the development of strategy, as well as monitoring our Executive team’s delivery.

They each serve on a variety of Board committees and have direct access to our senior management. We encourage both formal and informal contact with our wider business to develop a deeper understanding. They provide insights to the Board following engagement with internal and external stakeholders, including about our people and our company’s culture.

Company Secretary

Our Company Secretary is responsible for guiding the Board in meeting the requirements of relevant legislation and regulation, and also for ensuring that Board procedures are both followed and regularly reviewed.

Directors always have access to the advice of the Company Secretary, as well as independent professional advice where needed, to assist them in carrying out their duties.

Safety Committee report

Lawrence Gosden
Committee Chair

Composition

Member	Scheduled meetings attended
Alan Cumming (Chair until 29 April 2022)	**1/1**
Lawrence Gosden (Chair from 30 April 2022)	**6/6**
Kathryn Cearns	**4/5**
Janette Beinart	**4/6**
Simon Blanchflower	**1/1**
Nick Harris	**6/6**
Vanessa Howlison	**6/6**

The committee's membership comprises three Non-Executive Directors, including: the committee Chair; our Chief Executive; and our Chief Financial Officer.

Our Chairman, Chief Highways Engineer, Health, Safety and Wellbeing Director, Road Safety Director (from January 2023), General Counsel and Head of Road User Safety attend each meeting. The Chief Road Safety Adviser, Professor Nick Reed, is also a regular attendee. Other members of our Executive team and senior managers with safety responsibilities attend the committee when required.

The Safety Committee ensures that the Board fulfils its leadership responsibilities in relation to our health, safety and wellbeing ambition, including strategy and management arrangements.

The committee works closely with our Executive team to monitor safety performance so that we and our supply chain have a strong and continuously improving safety culture. It provides leadership to ensure that key risks are identified, appropriately managed and mitigated. It is also responsible for setting clear expectations to improve safety standards across our company, supply chain partners and the SRN. The committee works closely with DfT, benefiting from its broader perspective and input on all health, safety and wellbeing matters.

The work of the committee

Safety and wellbeing underpin the operating performance of our company and everything we do. This means the committee has a vital leadership role to play, focusing on:

- road user safety
- our people's safety and wellbeing
- the safety performance of our supply chain
- other work to improve health, safety and wellbeing across our organisation and our supply chain

Road user safety

Part of the committee's role is to review and, where appropriate, challenge our company's approaches to improving road safety.

At each of its meetings during the year, the committee reviewed reports on collision statistics, including the *2021 Road user statistics* (Stats19) published by DfT. These provided a better understanding of fatality risks and where improvements could be made. Drawing comparisons against our 2005–2009 baseline, in 2021, the number of people killed or seriously injured reduced by 42%[1] and fatalities reduced by 38%.

1 These are adjusted figures. The Office of National Statistics (ONS) has developed a methodology to quantify the effect of the introduction of injury-based reporting systems (CRASH and COPA) on the number of slight and serious injuries reported by the police, and to estimate the level of slight and serious injuries as if all police forces were using injury-based reporting systems. Further details of the severity adjustments and when they are recommended can be found in the Guide to severity adjustments.

A standing agenda item is an update from the General Counsel, who provides details on inquest proceedings and police investigations.

As part of its focus on smart motorways, the committee received regular updates on work undertaken to complete actions from DfT's *Smart motorway safety evidence stocktake and action plan*, published in March 2020.

Other briefings included:

- **Drainage/flooding** – A cross-directorate approach to addressing the findings of the internal drainage inspections audit, carried out in 2021, was presented. Actions have been agreed across several directorates and added into an integrated plan.
- **Road Safety Division** – A new Road Safety Division within our Safety, Engineering & Standards directorate was approved. This merged the Road User Safety Group and the Motorway Development Division within the directorate.

Further regular topics included updates on: incursions; commercial fleet safety; air quality; motorcycle safety; and our company's overarching strategic roads safety communications approach during the second road period.

In terms of suicide prevention, data and observations were shared to give a national context for suspected suicides and suicides. Plans were also shared about future work to better understand suicides on our roads and improve suicide prevention measures.

A six-step approach to the road to zero harm has been developed and started to be delivered. The committee discussed the Executive Safety Committee's approval of an alternative approach to our long-term ambition of zero harm, reflecting both the national and international environment of road casualty reduction. A three-tiered approach had been approved by the Executive Safety Committee, ready for approval by the Board Safety Committee.

Our people's safety and wellbeing

The physical and mental health of our people continued to be a key area of focus for the committee. Over the last year, the accident frequency rate for our people decreased from 0.05 to 0.03 (from 7 to 4 RIDDOR accidents). The lost time incident frequency rate for our people remained at 0.18, though the number of lost time incidents increased from 25 to 27.

The committee regularly reviewed occupational health and wellbeing updates about our people, discussing direction, key themes and performance.

The committee received an update on the work undertaken by the Fatal Risk Control Group, which was established in September 2021 following an independent review of fatal risks. The update outlined the existing control measures, the programme of work and plans to formalise the group's governance and assurance reporting lines.

The safety performance of our supply chain

The committee reviews our supply chain's safety performance at each of its meetings and determines where improvements could be made. The Board undertakes regular safety visits to our sites to help in this task.

This year, the lost time incident rate of our supply chain increased from 0.15 to 0.17 (59 lost time incidents, which is the same as the previous year). The supply chain RIDDOR accident frequency rate increased from 0.07 to 0.08 (from 27 to 28 IDDOR accidents).

The committee reviewed regular updates on mental health, wellbeing and suicide prevention within our supply chain and the wider construction industry. The work of the Supply Chain Safety Leadership Group, focused on improving safety performance across our network, was shared with the committee. Following a risk profiling exercise, nine significant risks have been identified. The group will focus on these risks in future.

Home safe and well

Our *Home safe and well* approach continues to play an important role in safety and wellbeing. One aspect is our 'Be the change' programme, which sets out how to develop our cultural maturity. The committee was updated on the programme and the intended company-wide roll out, and introduced to one of the programme's ambassadors.

Each directorate has a plan that works to the corporate themes of *Home safe and well*. Operations shared their updated *Home safe and well plan* to the committee, presenting on progress. Their plan was based on continued work in accordance with the *Home safe and well* focus areas: effective leadership; capable people; clear expectations; engaged stakeholders; a learning organisation; and health, safety and wellbeing by design.

External perspectives

Guest speakers help the committee gain an outside perspective on various topics relating to safety and wellbeing.

This year, the Head of Mobility Solutions and the Senior Expert on Automotive Safety Systems from Bosch discussed the role of vehicle technologies in improving road user safety, particularly focusing on interior monitoring and connected safety systems. They explained that National Highways and other companies had a voice in how the technology develops so it was noted for the Executive to take this forward.

The Director of Operational Safety at Jacobs Engineering shared a perspective on meeting the future needs of customers. The presentation looked at data supporting the view that customer safety perception was at odds to actual performance and the importance of communicating openly with the public about the safety and environmental impact of schemes and benefits.

Detective Chief Superintendent Andrew Cox talked about the strategic police priority on preventing future road deaths. He discussed what the police are doing to prevent deaths and where we can work together.

Nominations Committee report

Dipesh Shah OBE
Committee Chair

Composition

Member	Scheduled meetings attended
Dipesh Shah (Chair)	**3/3**
Roger Lowe	**1/1**
Alan Cumming	**1/1**
Kathryn Cearns	**3/3**
Janette Beinart	**3/3**
Carolyn Battersby	**3/3**
Lawrence Gosden	**3/3**

Members of the committee include all of the Non-Executive Directors, including the committee Chair and Shareholder Representative Non-Executive Director.

Our Chief Executive, Executive Director of Human Resources and Organisational Development and Company Secretary also attend meetings.

The committee's role is to make Board and Executive appointments. This is subject to approvals required by the *Articles of association*, the *Framework document* and our Shareholder.

Specific responsibilities include:

- approving recommendations for the appointment of Executive Directors and Non-Executive Directors
- keeping the structure, size and composition of the Board and its committees (including their Chairs) under review
- the continuation in office of Directors, and the appointment process for Board members and our Company Secretary
- succession planning for the Board and for posts reporting to our Chief Executive, as well as ensuring planning arrangements are in place for the level immediately below
- giving full consideration to the challenges and opportunities facing our company and future skills needed

The work of the committee

The committee met three times during the year to consider talent planning and succession planning, both immediate and longer term, for our senior leadership team. This included our Chief Executive and his direct reports.

During the year, members of the committee provided input to the recruitment exercises for two new Non-Executive Directors. An executive search firm, Odgers Berndtson, assisted the committee in its search for new Directors as part of its succession planning, setting rigorous selection criteria and developing detailed role profiles. Odgers Berndtson has no connection with National Highways or any of our Directors.

The committee considers all recruitment in accordance with the Board’s diversity policy, as set out on page 233.

Audit and Risk Committee report

Kathryn Cearns OBE
Committee Chair

Composition

Member	Scheduled meetings attended
Kathryn Cearns (Chair)	**5/5**
Roger Lowe*	**1/2**
Carolyn Battersby	**5/5**

To note: Roger Lowe stood down from the Board (and therefore the committee) in June 2022.

To provide effective oversight of financial and operational risk, and to advise the Board accordingly, members collectively have a broad range of financial, commercial and IT expertise. The committee is chaired by Kathryn Cearns, who is joined by two additional Non-Executive Directors (although due to turnover of Board members this was reduced to one for a large part of the year). Membership includes the Shareholder-appointed Non-Executive Director, in accordance with the requirements of our company's *Framework document*.

Regular attendees include: our Chief Executive; Chief Financial Officer; General Counsel; Financial Controller; Corporate Assurance Director; and the National Audit Office's Financial Audit Director. Other senior management are called to attend as necessary.

As part of the role, the Chair is also a member of DfT's Group Audit and Risk Assurance Committee, representing National Highways as well as performing a similar check and challenge role to DfT's senior management.

The committee periodically meets with our Corporate Assurance Director and the National Audit Office's Financial Audit Director to discuss any matters without Executives present. The Chair meets separately with our Chief Financial Officer and our Corporate Assurance Director, and liaises with other senior managers and our Company Secretary as required.

HM Treasury publications, *Corporate governance: a code of best practice* and the *HM Treasury Audit Committee handbook*, set out the need for the Audit and Risk Committee Chair to report on the committee's annual activities. This formal update informs the Board and Chief Executive in his role as Accounting Officer and supports the governance report in our company's *Annual report and accounts*.

Role

The Audit and Risk Committee's principal role is to assist the Board's oversight of:

Financial reporting: The committee reviews significant accounting judgements and policies and assesses compliance with accounting standards and consistency in application on a year-to-year basis.

Narrative reporting: The committee considers whether the *Annual report and accounts* is fair, balanced and understandable, and whether it provides sufficient information to enable stakeholders to assess the company's in-year performance.

Internal controls and compliance with statutory, regulatory and Licence requirements: The committee considers the adequacy and effectiveness of the company's financial reporting and internal control framework. The committee also considers the systems and controls for preventing and detecting fraud, bribery, corruption, theft, money laundering and modern slavery.

Risk management: The committee reviews the efficacy of our company's risk assessment, management and monitoring processes.

The Corporate Assurance function: The committee reviews the completeness of the Corporate Assurance Programme, the reports arising from that programme and management's responses. The committee also considers whether the function is adequately resourced and is appropriately independent from management.

The National Audit Office (NAO): The committee approves the nature, scope, approach and fees applied for our external auditor's annual financial audit. The committee considers the auditor's independence, objectivity, expertise and resources, and reviews the results of their work and how any weaknesses are addressed.

Cyber security: The committee provides assurance that the company is managing cyber risk appropriately.

The committee also advises our Chief Executive in his role as Accounting Officer on any of the above subjects. Following each meeting, the Chair summarises the committee's activities, main discussion points and findings at the next Board meeting, making recommendations as appropriate.

The work of the committee

At each meeting, the committee receives updates from Finance, Corporate Assurance and the National Audit Office.

The committee has oversight of the company's overall risk management approach, including how it is reported to the Board. As a sub-committee of the Board, the committee is also responsible for examining certain strategic risks to ensure that effective mitigation is in place.

The committee monitors progress made on the implementation of management actions agreed by the business throughout the year.

The significant issues considered by the committee during 2022–23 were as follows.

Accounting standards and judgements

The committee assessed whether suitable accounting policies had been adopted and whether management had made appropriate judgements and estimates. Following discussion, the committee was satisfied in the following areas:

Accruals – The committee noted that the continuous improvement activity completed by the business meant a reduction in the number of errors identified by the NAO as part of their Financial Statement Audit. The business continued to monitor accruals throughout the year through their monthly accruals testing on large and small value accruals. This meant the risk of error was low in the year-end audit process.

Valuation of the SRN – The committee agreed to our company's revised approach to calculating the current cost of replacing our network, by applying the Implied Output Price Indicator (IOPI) instead of the previously used Highways England Construction Index. IOPI is an industry-specific index of actual inflation published by the Office for National Statistics and is widely used across our company's contracts. As the NAO involves its own experts, the committee also monitors the resolution of any problems that arise from differing expert views. This year, the committee noted that the approach was as aligned as possible to the requirements of the business as well as satisfying the experts' advice.

Impact of Autumn Statement announcements on the accounts – The committee questioned whether the deferral of several schemes (declared by the Autumn Statement) would impact the financial statements in terms of disclosures to be made. Members were assured that although scheme deferrals were announced by the Chancellor of the Exchequer, no scheme cancellations had been announced. Therefore, no in-year change had occurred from an accounting perspective that would alter any of the judgements in the annual report this year. This position was closely monitored by our Executive and the committee Chair kept informed ahead of the signing of the financial statements in July 2023.

Land and property provisions – The committee noted the work completed in year to improve the evidence base to support our land and property liabilities reporting.

The move towards controls-based auditing – The committee discussed the benefits of a move to a financial controls-based audit approach, noting the reduction in audit testing once the NAO can exercise a degree of comfort over the validity of the data reported within the accounts. The committee will monitor the business' progression towards applying controls-based auditing techniques throughout the 2023–24 financial year.

Audit and Risk Committee Agendas 2022–23

11 May 2022	22 June 2022	22 September 2022
• NAO: verbal update on progress on 2021–22 financial statements audit • Corporate assurance update • 2021–22 *Management assurance annual return* • 2021–22 Corporate assurance management actions summary • 2021–22 *Annual report and accounts* – update • 2021–22 Draft accounts • Draft *ARC Annual report* • Risk deep dive – reputation	• NAO: 2021–22 *External audit completion report* and *Letter of representation* • National Highways 2021–22 final financial accounts position • 2021–22 *Annual report and accounts* – final sign off and approval • 2021–22 *Annual assurance statement* • Corporate assurance update (verbal) • 2021–22 *Modern slavery statement* • 2021–22 *Annual counter-fraud report* • 2021–22 *Performance assurance report & monitoring statements* • 2020–21 *Licence compliance report*	• NAO: *Management letter* – final • Cyber security update • Digital Services management assurance actions update • *Project Gamma close-out report* • Deep dive: CRR03 – significant legal challenge • Corporate assurance update • Corporate Assurance Programme (part 2) • Commercial and procurement update • Dartford Crossing accounts update (verbal) • DfT: risk management work update

	• 2021–22 *Efficiency report*	(verbal) • NAO: RIS2 VFM study update (verbal)
16 January 2023	**28 March 2023**	
• NAO: *Audit planning report 2022–23* • Controls-based financial auditing • Functional standards update • Taskforce on Climate-related Disclosures • Corporate assurance update • *National Highways Anti-economic crime strategy 2022–2025* • *Modern slavery and human trafficking policy* • 2022–23 *Annual report and accounts* – indicative timetable • NAO: VFM review on RIS2 enhancements – next steps (verbal) • Update on forthcoming public bodies review (verbal)	• Interim progress report on the 2022–23 Financial Statement Audit • Accounting judgement and estimates for 2022–23 accounts • Cyber security update • Cabinet Office control changes • Update on commercial and procurement counter-fraud measures • Company enterprise-wide risk management update • Corporate assurance update (including the update to the Corporate Assurance Charter) • Corporate Assurance Programme 2022–23 • Terms of reference annual review	

Review of the *Annual report and accounts*

For the 2022–23 *Annual report and accounts*, a full draft was submitted for review in June 2023, prior to the Board's final approval. The committee's assessment drew on:

- the work of the Company Secretary, responsible for the report's production
- senior management confirmation that the content was fair, balanced and understandable
- the verification of core content, including KPI and key performance figures, completed by the Corporate Assurance function

Following its review, the committee was content that the 2022–23 *Annual report and accounts* was fair, balanced and understandable. On this basis, they recommended that the Board approve the final version at the July 2023 meeting.

The committee is also responsible for reviewing the final validated position on our company's performance, published separately within National Highways' *Performance monitoring statements*. The committee reviewed this document in the June 2023 meeting and recommended that the Board should also approve its publication.

In addition to the company's accounts, the committee also reviewed and approved the compliance and sign-off of the Dartford-Thurrock River Crossing statutory accounts.

Our external auditor

In accordance with our *Framework document*, the Comptroller and Auditor General is our appointed external auditor. The audit work is carried out by the NAO on his behalf. The NAO does not provide non-audit services but is responsible for carrying out value-for-money reviews, according to their statutory responsibilities.

During the year, the committee received the NAO's final 2021–22 *Management letter* and reviewed management's response to their findings. In January 2023, they reviewed the 2022–23 *Audit planning report* and monitored progress throughout the remainder of the year. In June 2023, the committee considered the Auditor's report as part of the final sign-off and approval of our company's accounts.

Use of external advisers in financial reporting, tax and related matters

We use professional firms when specialist advice is required, engaged through our established procurement framework. This year, we engaged Deloitte LLP to provide advice on VAT, corporation tax and employment tax, and to refresh our internal policies in these areas. We also used Atkins to assist in valuing the SRN for our financial statements.

The work of Corporate Assurance function, including internal audit

The Corporate Assurance function's primary purpose is to provide an objective and independent opinion on the effectiveness of our internal control, risk management and governance framework. The committee approves their charter, which defines the function's purpose, authority, responsibility and position within our company.

The function combines:

- **Corporate risk**, which oversees corporate risk management, assurance mapping and management assurance processes
- **Internal audit**, which incorporates risk, system, contract and IT assurance activity
- **Programme assurance**, which assures major project schemes at appropriate lifecycle stages and provides oversight of the effectiveness of end-to-end project governance
- **Health, safety and wellbeing assurance**, which assures company compliance with appropriate safety legislation
- **The Counter-Fraud Team**, which ensures appropriate governance is effective, evaluates key vulnerabilities and ensures these are managed effectively by the business and investigates allegations, as they are received

The committee reviewed and endorsed both parts of the Corporate Assurance Programme in September 2022 and March 2023, ensuring it aligned with our company's strategic priorities and key risks. It discussed the outcomes from the resulting work and monitored the close-out of agreed management actions, focusing on those that were overdue.

At each meeting, the Corporate Assurance Director updated the committee on key themes and issues arising from the function's work. These included:

- project and contract management control issues and improvements
- the effective operation of key financial and HR controls
- the effectiveness of operational and non-operational hardware and software assets

This year, the committee noted and discussed the following individual reports:

Joiners, movers and leavers process – The review identified fundamental weaknesses within the logical and physical access processes. Both components form a critical foundation to our security and allow other controls or mechanisms to function appropriately. The committee noted the lack of formally documented processes, procedures and guidance to ensure that the end-to-end logical and physical access processes operate in harmony with each other. This in turn has led to misunderstanding within the business and a lack of compliance by line managers. Both combine to compromise system and physical security access controls. The committee considered management's response and will monitor the progress of the implementation of the agreed corrective action throughout 2023–24.

Independent assurance reviews – Programme assurance, covering our major project schemes, comments on the confidence in a project's delivery, based on the effectiveness of risk management, governance and control compliance. During the year, the committee noted several projects had received red-rated reviews, reflecting weaknesses in governance and control. Each project was subject to a further subsequent review. In most cases, the assurance rating was raised to reflect the improvements made since the original review.

DfT's management assurance process – We participate in this annual exercise as it allows us to evaluate whether our company operates appropriate levels of governance, risk management and internal control against a series of pre-defined categories. In-year, the committee received quarterly updates from our interim exercises and noted its content accordingly. The committee endorsed the final submission to DfT in May 2023, with the committee noting the improvements required in the security categories.

Evaluating the effectiveness of internal audit

The committee assesses the effectiveness of our internal audit team as part of their ongoing assessment of the Corporate Assurance function.

The last full external quality review was completed in March 2019 by the Institute of Internal Auditors. This resulted in a 'generally conforms' rating (their top rating) being awarded. In June 2023, the committee noted the results of the Corporate Assurance Director's self-assessment against the government functional standard (GovS009). As such, they considered it appropriate that the next independent review will be commissioned in 2024, and will cover the whole function, not just internal audit.

In 2022–23, the committee Chair met with the Corporate Assurance Director without management present to assess the role and effectiveness of the function. The Chair was satisfied that the Corporate Assurance function is operating effectively.

Risk management

The Board has delegated detailed oversight of risk management functionality to the committee, who, in turn, report their findings back to the Board.

This year, the committee responded to the Board's challenge to improve the approach to risk management, particularly how corporate (strategic) level risk is viewed, used and reported. As a result, the committee noted the following improvements achieved through the year:

- Harmonised risk language, enabling consistency and better conversations across the business
- Refreshed risk appetite framework, simplifying the language and approach to refine the escalation and cascade of risk from tactical to strategic levels and vice versa, and replacing the complex ranges previously used with tolerance levels linked to the KPIs, providing clarity on how company performance drivers are impacted by risk
- Completed roll-out of our interim risk recording solution (BRISC), which was well received by the business

The committee noted that the transition of risks from local risk registers into BRISC will continue throughout spring and summer 2023. Collectively, the use of the tool will enhance risk recording, reporting and analysis at local and corporate levels. It will also allow for the identification of system requirements for a new corporate risk recording platform, due for implementation in 2023–24.

In previous years, the committee received a presentation on a specific principal risk or risk theme. These 'deep dives' were important for the committee to understand the key challenges in each area and whether identified mitigations are suitable. Recognising that principal risks have been aligned to specific Board committees, this year, members focused on those risks that the committee are specifically allocated. Therefore, the committee focused on:

- cyber threats, and whether there is the potential for inappropriate information, data governance, security and management to impact on achieving our business objectives
- our company's approach to managing the threat of economic crime
- our company's management of the risk of a significant legal event occurring

In all cases, the committee was satisfied that our risk processes were robust, with appropriate plans and monitoring in place.

Economic crime

The committee reviews and informs the Board about our company's whistleblowing (raising concerns) procedures, including arrangements for investigating concerns raised. The committee also reviews the effectiveness of our company's overarching economic crime strategy.

This year, the committee noted the launch in December 2022 of an external platform for our people, our supply chain or the public to raise concerns relating to our practices. Combined with the established internal email and phone lines, they had oversight of the 68 referrals received. They noted that this was an increase to the 49 raised last year and is a combination of a raise in general fraud awareness, together with the impact of the new platform.

Most referrals received related to complex issues within our supply chain. While no cases of economic crime were proven to the required criminal standards, in all cases the investigations completed highlighted a failure of our supply chain to comply with their own procurement process and contractual obligations. Several improvement actions with our Commercial and Procurement and scheme directors' function were agreed to strengthen compliance and oversight across our supply chain.

The committee noted that there have been no attempts to divert payments to fraudulent bank accounts for the goods and services we buy.

In-year, the committee noted the replacement of the Anti-Economic Crime Group with the newly formed Business Ethics Committee and placed reliance on their broader remit to monitor all aspects of economic crime and ethical behaviours across the business.

Our company fully aligns with the Cabinet Office's Government Functional Standard for improving counter-fraud capability across government (GovS013). This year, the committee noted that we remained 'fully compliant' with the standard.

The committee noted that our company has improved its understanding of internal and external economic crime risks. The information collated is updated on an annual basis and used to carry out proactive testing of control activity to improve resilience.

Statement on company effectiveness

Our Corporate Assurance Director's annual assurance statement provides an overall opinion. It offers reasonable, rather than absolute, assurance on the efficacy of risk management, internal control and governance arrangements. It draws from corporate assurance activity and other assurance work available to the Director for consideration.

The statement was discussed by the committee in June 2023, who noted this year's 'Moderate' assurance rating and recognised that we have:

- a good governance structure to help us carry out our activities
- a maturing approach to risk management, demonstrating a sound control environment

The statement noted no breaches to legislation, HM Treasury or Cabinet Office requirements that needed to be raised within the Directors' statement (Disclosures and statements section) of our company's 2022–23 *Annual report and accounts*.

Based on the arrangements set out above, and the information provided to the committee and our Chief Executive, the committee consider that there is a sound system of internal control, risk management and governance in place and working effectively across our company.

Kathryn Cearns, OBE
Audit and Risk Chair
20 June 2023

Investment Committee report

Janette Beinart
Committee Chair

Composition

Member	Scheduled meetings attended
Janette Beinart (Chair)	**5/5**
Alan Cumming*	**0/1**
Carolyn Battersby*	**5/5**
Lawrence Gosden*	**2/5**
Diego Oliva*	**2/2**
Nick Harris**	**5/5**
Vanessa Howlison***	**5/5**

Members of the committee include four Non-Executive Directors*, including the committee Chair, as well as our Chief Executive** and Chief Financial Officer***.

Our General Counsel also attends the meeting. Other members of the Executive team who are responsible for the programmes and contracts under consideration attend meetings as required.

The committee supports the Board in exercising its investment decision-making authority. It advises the Board on investment approvals over £200 million and on other matters relating to the delivery of our investment portfolio.

On decisions relating to Tier 1 schemes, which are those over £500 million or where the treatment is considered novel or contentious according to the HM Treasury definition, the committee advises DfT's Investment Portfolio and Delivery Committee on whether the investment is appropriate.

The committee works closely with our Executive Investment Decision Committee to ensure effective governance of public expenditure. The committee also supports our Chief Executive in discharging his responsibilities as Accounting Officer.

This assurance regime meets the criteria outlined in our *Framework document*, as agreed with DfT.

The work of the committee

The committee met five times this year. The work of the committee covered three key areas:

1. Monitoring the investment programme

At each meeting, the committee reviews capital portfolio progress and status, scrutinising capital forecasts and considering delivery risks.

During the year, the committee focused on:

- **Updates to the portfolio's capital baseline** This reflected changes in scheme costs, additional schemes and activities now being delivered as part of the portfolio.
- **Reprofiling second road period capital expenditure** – This included investment scenarios provided to DfT, as part of the Autumn Statement (2022), to manage the capital portfolio cost pressures driven by increases in inflation.
- **Drawdown against the central risk reserve The committee ensured** that these drawdowns were appropriate and monitored the rate of allocation of central risk reserve funding.
- **Impacts of delays to statutory planning decision and legal challenges** – These delays resulted in changes to scheme schedules, budget profiling and potential cost increases.

2. Reviewing proposed investments

The committee reviews our Executive team's investment proposals and plans for project delivery, making recommendations to the Board in line with its delegations. The committee considers value-for-money assessments, forecast benefits and independent review outcomes.

During the year, the more significant proposals endorsed by the committee for subsequent approval by DfT's Investment Portfolio and Delivery Committee included:

- **Advanced construction phase funding for our A12 Chelmsford to A120 Widening scheme** – This is a £1 billion scheme to widen the A12 between junction 19 (Chelmsford) and junction 25 (A120 interchange) to ease congestion and cope with increasing traffic demands.

- **Entering into contract with our Delivery Integration Partners for our A66 Northern Trans-Pennine scheme** – This is a £1.3 billion scheme to improve the A66 between the M6 at Penrith and A1(M) at Scotch Corner. The scheme will involve upgrading single carriageway sections of road to dual carriageway standards and making improvements to the junctions along the route. This scheme is part of government's 'Project Speed' initiative.
- **Full business case for our A428 Black Cat to Caxton Gibbet scheme** – This c.£1 billion scheme will upgrade the route between the Black Cat and Caxton Gibbet roundabouts, delivering a new 10-mile dual carriageway and a number of junction improvements. Our scheme will improve journeys between Milton Keynes and Cambridge, bringing communities together and supporting long-term growth in the region.
- **Award of the Roads North of the Thames Main Works Contract for our Lower Thames Crossing scheme** – This £1.2 billion contract is part of the broader Lower Thames Crossing scheme, which includes a 2.6-mile twin-bore tunnel that is set to become the longest road tunnel in the UK.

The more significant approvals made by the committee included:

- **Award of our National Pavement Delivery Framework** – This is a five-year £1.3 billion framework for the supply of materials, plant and labour to carry out patching, surfacing and pavement construction, ensuring roads and pathways are maintained to the highest standard across our network.
- **Advanced development and construction phase funding for A47 North Tuddenham to Easton** – This scheme will complete the dual carriageway between Norwich and Dereham, supporting economic growth and easing congestion in the area.
- **Construction funding for Mottram Moor Link Road and A57 Link Road** – This scheme will provide a dual carriageway bypass around the town of Mottram near Manchester. This will also serve as an alternative route for traffic heading north and south on the A57.

3. Monitoring performance

The committee sets aside time for in-depth reviews of the performance of projects and major programmes in construction. These reviews cover forecast costs, completion dates, change control, value for money and portfolio risks. The committee also considers emerging strategies for delivering future investment programmes and the overall performance of our supply chain.

This year, there was particular emphasis on the delays to statutory planning decisions, including legal challenges (e.g. A428 Black Cat to Caxton Gibbet) and record levels of inflation, and the subsequent impacts of both factors.

During the year, the committee received regular updates and reviewed the performance of our Lower Thames Crossing, A303 Amesbury to Berwick Down (Stonehenge Tunnel) and A66 Northern Trans-Pennine schemes. The committee also received a performance update on our Regional Delivery Partnership Programme.

The committee reviewed and endorsed the refreshed Investment Committee terms of reference in November 2022, which was subsequently approved by the Board in January 2023.

Remuneration Committee report

Kathryn Cearns OBE
Interim Committee Chair

Composition

Member	Scheduled meetings attended
Roger Lowe (Chair until 10 July 2022)	**1/2**
Kathryn Cearns (Chair from 11 July 2022)	**5/5**
Dipesh Shah	**5/5**
Carolyn Battersby	**5/5**
Lawrence Gosden	**1/1**
Simon Blanchflower	**1/1**

The committee is chaired by Kathryn Cearns. Members include three other Non-Executive Directors, including the Board Chair.

Our Chief Executive attends all meetings, except when his own remuneration is under review. DfT's Director for Shareholdings attends meetings as an observer on behalf of our Shareholder. The committee is advised by our Executive Director of Human Resources and Organisational Development. Our Director of Reward and Performance and Divisional Director of Strategic Finance also attend meetings.

EY are advisers to the committee on a call-off basis. In 2022–23, EY provided advice to our Remuneration Committee on market trends for potential consideration as the committee looks forward to the third road period.

The committee sets a robust, transparent and formal procedure for developing policy on Executive remuneration. This includes the total reward packages for our Chief Executive, Executive Directors and Non-Executive Directors, subject to the approval of our Shareholder.

The committee is also responsible for keeping the *Remuneration framework*, required under the *Framework document*, under review. Any amendments must be agreed with our Shareholder, including recommending annual performance targets.

The committee is responsible for deciding or recommending proposals for approval by the Board. It provides guidance to our Executive team on company-wide reward and incentive plans, as well as the structure of remuneration packages for senior management.

The work of the committee

Our company operates within the *Remuneration framework*, as agreed with our Shareholder. This is designed to promote the long-term success of our company. The framework includes the criteria for performance-related pay, which is designed to be transparent, stretching and rigorous. The overall remuneration philosophy is to provide National Highways with a distinctive, competitive and flexible total reward package which enables us to attract and retain talented staff and embed a high-performance culture, while remaining affordable and driving Shareholder value.

The committee maintains close oversight on organisational initiatives relating to employee performance and reward. The committee follows the requirements of the *Remuneration framework* and broad policy for remuneration, which take into account DfT and HM Treasury guidance and rules on senior pay for arm's-length bodies. These cover the basic pay, performance-related pay, pensions and benefits of:

- our Chief Executive
- the members of our Chief Executive's team, some of whom will be Board Directors
- the senior management population (Director-graded roles)

All Directors, including our Chief Executive, are excluded from any discussions and decisions on their own remuneration.

There is a focus on pay at all levels to ensure decisions are fair, consistent and transparent.

The committee reviews and approves senior leadership performance ratings and pay review proposals. When determining annual salary increases for our senior leadership team, the committee is sensitive to the wider pay and employment conditions in the business and across the public sector.

The committee also reviews the performance ratings for our general employee population and proposals for pay review. We operate a consistent approach to performance management that applies to all our people, linking to pay and performance-related pay awards. Details of our performance-related pay scheme rules are available to all our people on our internal portal, supported by frequently asked questions.

As a government-owned company, long-term incentives such as shares or share options are not available. Performance-related pay is therefore the sole variable remuneration element within the reward package for senior roles. The rules of our company's performance-related pay scheme limit the maximum payment to 20% of base salary for our senior group.

Chair's highlights

The committee reviewed the corporate KPI performance for 2021–22 and its impact on performance-related pay for all our people, including Executive Directors.

The committee also reviewed performance-related pay for the 2022–23 performance year. One significant change was made to the metrics: the importance of the ongoing smart motorway actions was reflected by the establishment of a new target for this area. This aligned with our response to the Transport Select Committee and further reinforces the importance of customer safety. Our smart motorway metric was based on three elements: traffic officer and sign setting response times; technology availability; and the installation of emergency areas.

The committee reviewed the following standing items during the year:

- Use of contingent labour and consultants
- Use of specialist pay freedoms
- Activity and decisions of our Reward and Resourcing Executive Committee, which considers remuneration issues for employees below Executive level
- Membership and management of pension schemes

The committee also considered the following items:

- Remuneration proposals for recruitment of other members of the Executive team
- Proposed changes to the performance-related pay scheme for 2022–23, to be submitted for approval by DfT
- Outturns for the performance-related pay scheme for 2021–22, to be provided to the Roads Minister
- Governance of the National Highways Defined Contribution Group Personal Pension Plan

Executive Directors’ remuneration (audited)

The remuneration of Executive Directors for 2022–23 was as follows:

	Year	Salary	PRP	Pension related	Taxable Benefits	Total
Nick Harris	**2022–23**	**£312,120**	**£18,972**	**£31,212**	**£22,345**	**£384,649**
	2021–22	£293,003	£20,000	£22,045	£20,076	£355,124
Vanessa Howlison	**2022–23**	**£208,278**	**£25,487**	**£20,828**	**£8,712**	**£263,304**
	2021–22	£205,538	£20,000	£20,554	£8,063	£254,154

Notes:

1. Nick Harris received £31,212 in lieu of pension payments in 2022–23.
2. Vanessa Howlison is a member of the National Highways defined contribution Group Pension Plan. Employer contributions are equal to 10% of salary.
3. The PRP paid in 2021–22 relates to performance within the financial year 2020–21 and that paid in 2022–23 related to performance in financial year 2021–22.
4. ‘Taxable Benefits’ amounts relate to travel expenses for secondary workplaces as defined by HMRC (expense grossed up by 45%).
5. Only those members of the Executive team who are (or were) also members of the National Highways Board have their remuneration reported.

Non-Executive Directors' remuneration (audited)

The remuneration of Non-Executive Directors for 2022–23 was as follows:

Member	Year	Fee	Taxable benefits	Total
Dipesh Shah (Chairman)	**2022–23**	**£108,000**	**–**	**£108,000**
	2021–22	£108,000	–	£108,000
Janette Beinart	**2022–23**	**£28,000**	**–**	**£28,000**
	2021–22	£28,000	–	£28,000
Kathryn Cearns	**2022–23**	**£30,500**	**–**	**£30,500**
	2021–22	£28,000	–	£28,000
Roger Lowe	**2022–23**	**£7,828**	**–**	**£7,828**
	2021–22	£28,000	–	£28,000
Lawrence Gosden	**2022–23**	**£27,750**	**–**	**£27,750**
	2021–22	£28,000	–	£28,000
Diego Oliva	**2022–23**	**£18,750**	**–**	**£18,750**
	2021–22	–	–	–
Simon Blanchflower	**2022–23**	**£2,083**	**–**	**£2,083**
	2021–22	–	–	–
Alan Cumming	**2022–23**	**–**	**–**	**–**
	2021–22	–	–	–
Carolyn Battersby	**2022–23**	**–**	**–**	**–**
	2021–22	–	–	–

Notes:

1. Service details for directors are shown on page 206.
2. From 1 April 2017 the fees were updated to £25,000 plus an additional £3,000 for chairing a committee. These fees remain unchanged for 2022–23.
3. Roger Lowe was the serving Chair on our Remuneration Committee, a position that he held from March 2020. Roger left on 10 July 2022. This role is now delivered by Kathryn Cearns.
4. Janette Beinart is the serving Chair on our Investment Committee a position that she has held from March 2019.
5. Alan Cummings was the serving Chair of the National Highways Safety Committee a position that he held from January 2018. He ceased being paid by National Highways on 3 April 2018 when he became an Executive Director at the Nuclear Decommissioning Authority. Alan stood down from the Board on 29 April 22. The role is now delivered by Lawrence Gosden.
6. Kathryn Cearns is the serving Chair on our Audit and Risk Committee, a position that she has held from September 2018. From 1 June 2022 Kathryn has also served as the Chair on the National Highways Remuneration Committee.
7. Carolyn Battersby became the Shareholder-appointed Non-Executive Director representative from 11 September 2019. She is not paid for serving as Shareholder-appointed Non-Executive Director and did not receive any fees in the 2022–23 financial year.
8. Carolyn Battersby stood down from the Board on 31 March 2023
9. Simon Blanchflower joined as a Non-Executive Director in March 2023.
10. Diego Olivia joined as a Non-Executive Director in July 2022.

Pay multiples (audited)

	2022–23	2021–22
Chief Executive	**£384,649**	£355,124
Number of staff	**6,648**	6,187
Lower quartile point	**1,671**	1,538
Lower quartile salary	**£27,100**	£29,416
Lower quartile remuneration	**£27,239**	£30,136
Chief Executive ratio	**14.12**	11.78
Median point	**3,264**	3,102
Median salary	**£35,637**	£35,315
Median remuneration	**£36,426**	£36,075
Chief Executive ratio	**10.56**	9.84
Upper quartile point	**4,988**	4,626
Upper quartile salary	**£46,804**	£45,004
Upper quartile remuneration	**£47,518**	£46,339
Chief Executive ratio	**8.09**	7.66

Notes:

1. The median remuneration of the company’s staff in 2021–22 and 2022–23, as shown in the table above, is based on annualised full-time equivalents. For 2022–23 this is £36,426.
2. The ratio between the median remuneration and the highest paid Director is 10.56. This has increased from the 2021–22 figure of 9.84.
3. In 2022–23, no employee received remuneration in excess of the highest paid Director. Full-time equivalent remuneration ranged from £16,100 to £334,152 (including performance-related pay).
4. Total remuneration includes salary, non-consolidated performance-related pay and benefits-in-kind. It does not include severance payments, employer pension contributions and the cash equivalent transfer value of pensions.
5. The salary element of the highest paid Director’s remuneration increased by 6.52 % in 2022–23. (Average element for the workforce has increased by 0.3%).

6. The highest paid Director received an £18,972 performance-related pay element this year compared to £20,000 in 2021–22 (5.1% decrease). (Average element of the workforce between 2021–22 and 2022–23 for performance-related pay was a 36.1% decrease).

Supporting notes

Pensions

As an employer we offer employees access to: The Civil Service Pension Schemes; National Highways Personal Pension Scheme; and the Mercer Defined Benefit Master Trust (previously known as the Federated Pension Scheme). These are described in more detail below, including the eligibility criteria applied.

Employees who joined under a compulsory transfer from the Highways Agency on 30 September 2015 remain eligible to participate in either The Principal Civil Service Pension Scheme or the Public Service (Civil Service and Others) Pensions Scheme, also known as Alpha. The membership of these schemes is declining, with new employees only eligible if transferring from other government departments.

Under the Principal Civil Service Pension Scheme, the Public Service (Civil Service and Others) Pensions Scheme and the National Highways Personal Pension Scheme, pension liabilities do not rest with our company. For these schemes, employer pension contributions are recognised as they become payable following qualifying service by employees.

The Principal Civil Service Pension Scheme

This is an unfunded public sector pension scheme, operated under the cost control mechanism as outlined in Section 12 of the Public Service Pension Act 2013. A full actuarial valuation was carried out as at 31 March 2016. Details regarding the scheme can be found in the resource accounts of the Cabinet Office: Civil Superannuation (www.civilservice.gov.uk/pensions).

The operation of the cost control mechanism in relation to the 2016 valuations was paused on 30 January 2019. Contribution rates for employers and members have, therefore, remained unchanged from the previous year. For the year to 31 March 2023, employers' contributions of £21.5 million (2021–22 £22.4 million) were payable to the Principal Civil Service Pension Scheme and Public Service (Civil Service and Others) Pensions Scheme at one of four rates in the range 26.6% to 30.3% of pensionable earnings, based on salary bands.

Our people can choose to switch to a Partnership Pension Account. This is a defined contribution scheme operated by Legal and General, the Scheme Manager (Cabinet Office) appointed single provider. Employer contributions are age-related and range from 8% to 14.75%. The company also matches employee contributions up to 3% of pensionable earnings. Contributions due to the partnership pension account as at 31 March 2023 were £8,586 (2021–22 £14,625). In addition, employer contributions of £3,936 (2021–22 £4,060). 0.5% of pensionable pay, were payable to the Principal Civil Service Pension Scheme to cover the cost of the future provision of lump sum benefits on death in service or ill health retirement of these employees.

The National Highways Personal Pension Scheme

Employees who joined the company with effect from 1 April 2015 are eligible to participate in the National Highways Personal Pension Scheme. The pension scheme came into effect on 1 April 2015 and is a defined contribution group personal pension plan provided by Legal and General Ltd. The default contributions are 5% (employee) and 10% (employer). In addition, life insurance cover is provided for members of the plan at an average cost of 0.55% of gross salary.

As this is a defined contribution scheme, our company incurs no liability for future pension costs of members of the pension plan. For the year to 31 March 2023, employers' contributions of £18.7 million (2021–22 £14.2 million) were payable to the plan.

The Mercer Defined Benefit Master Trust

We are a participating employer within the multi-employer Mercer Defined Benefit Master Trust scheme. It is operated by Mercers, with the organisation holding responsibility for future member pension costs for the two sections to which we are registered as sponsoring employer: the National Highways Company Limited Section; and the National Highways Severn Bridges Section.

Mercers both manage and administrate the scheme, with trusteeship provided by professional trustees: PAN Trustees, Independent Trustee Services and PTL. We are required to meet each section's liabilities and full actuarial valuations are completed by the scheme's appointed trustees on a triennial basis.

The National Highways Company Limited Scheme

This scheme was established on 1 July 2016 to protect the defined benefit pension rights of individuals joining the company via a 'Transfer of Undertakings Regulations'. The current membership is low, and instances of new joiners are limited.

The contribution rates are based on the last actuarial valuation of the scheme as at 5 April 2019, outlined in the Statement of Funding Principle agreed with the trustees in July 2020.

The employer is required to pay contribution at the annual rate of 56.8%, less the member contributions which are dependent on contractual employee contribution rates agreed at the time of transfer. Employer's contributions of £0.3 million were paid to this section in the year to 31 March 2022 (2021–22 £0.3 million).

The National Highways Severn Bridges Scheme

This scheme was established when the existing Severn River Crossing Pension Fund was wound up and transferred on 31 December 2019, when we assumed responsibility for the Severn River Crossing from Severn River Crossing Plc. The current active membership of the scheme is limited; this section is made up of predominantly deferred or pensioner members. The contribution rates are based on an actuarial valuation of the scheme as at 5 April 2020, outlined in the Statement of Funding Principle and agreed with the trustees in August 2021. Employer contributions are 38.3% of pensionable earnings.

Employer's contributions of £0.1 million were paid to this section in the period to 31 March 2023 (2021–22 £0.1 million).

The actuarial valuation of this section as at 5 April 2020 revealed a funding shortfall (technical provisions minus value of assets of £5,221,000). To eliminate the funding shortfall, a Recovery Plan was agreed with the trustees, with additional contribution to be paid of £1,100,000 per annum until 31 March 2024.

Average number of persons employed (audited)

The average number of full-time equivalent persons employed during the year was as follows:

	Year to 31 March 2023			Year to 31 March 2022
	Permanent staff	**Other**	**Total**	**Total**
Traffic officer staff	1,543	–	1,543	1,538
Direct support to front line projects and service delivery	1,833	11	1,844	1,939
Staff engaged on capital projects	2,676	7	2,683	2,535
Average FTE persons employed	**6,052**	**18**	**6,070**	**6,012**

During the year ending 31 March 2023 the actual full-time equivalent employees (FTE) increased from 6,032 to 6,049.

Civil service and other compensation schemes – exit packages (audited)

Where appropriate, redundancy and other departure costs have been paid in accordance with the provisions of the Civil Service Compensation Scheme, a statutory scheme made under the Superannuation Act 1972. The figures disclosed relate to exit packages agreed in the year.

Where National Highways has agreed early retirements, the additional costs are met by our company and not by the Civil Service pension scheme. Ill-health retirement costs are met by the pension scheme and are not included in the table.

	Year to 31 March 2023		Year to 31 March 2022	
	Number of compulsory redundancies	Number of other departures agreed	Number of compulsory redundancies	Number of other departures agreed
<£10,000	3	3	–	–
£10,000 – £25,000	1	2	–	1
£25,000 – £50,000	1	–	–	2
£50,000 – £100,000	–	–	–	–
£100,000 – £150,000	–	–	–	–
£150,000 – £200,000	–	–	–	–
£200,000 plus	–	–	–	–
Total number of packages	**5**	**5**	**–**	**3**
Total Resource cost (£)	**63,419**	**82,474**	**–**	**73,706**

No exit package above the Cabinet Office threshold of £100,000 took place in the period.

National Highways off-payroll appointees, consultancy and temporary staff

As part of the review of tax arrangements of public sector appointees published by the Chief Secretary to the Treasury on 23 May 2012, departments and their arm's length bodies have been asked to report on their off-payroll engagements and related tax arrangements for the periods and scope outlined by HM Treasury. This data is shown in the following tables:

Table 1: For all off-payroll engagements as of 31 March 2023, for more than £245 per day and that last for longer than six months

No. of existing engagements as of 31 March 2023	15
Of which:	
No. that have existed for less than one year at time of reporting.	14
No. that have existed for between one and two years at time of reporting.	–
No. that have existed for between two and three years at time of reporting.	1
No. that have existed for between three and four years at time of reporting	–
No. that have existed for four or more years at time of reporting.	–

We confirm that all existing off-payroll engagements, outlined above, have at some point been subject to a risk-based assessment. This covered whether assurance was required around whether the individual is paying the right amount of tax; where necessary, further evidence was sought.

Table 2: For all new off-payroll engagements, or those that reached six months in duration, between 1 April 2022 and 31 March 2023, for more than £245 per day and that last for longer than six months

No. of new engagements, or those that reached six months in duration, between 1 April 2022 and 31 March 2023	20
Of which:	
Number not subject to off-payroll legislation	20
Number subject to off-payroll legislation and determined in scope of IR35	–
Number subject to off-payroll legislation and determined as out of scope of IR35	–
No. of engagements reassessed for consistency/assurance purposes during the year.	–
No. of engagements that saw a change to IR35 status following a consistency review.	–

There were a total of 20 new engagements that joined National Highways between 1 April 2022 and 31 March 2023, who will be with us longer than six months and will earn over £245 per day. All contracts included contractual clauses giving our company and DfT the right to request assurance. All engagements were ones where DfT requested tax compliance evidence and there were no contracts where an individual was exempt from this requirement.

Table 3: For any off-payroll engagements of Board members and/or senior officials with significant financial responsibility, between 1 April 2022 and 31 March 2023

No. of off-payroll engagements of Board members and/or senior officials with significant financial responsibility, during the financial year.	–
Total no. of individuals on-payroll and off-payroll that have been deemed ‘Board members and/or senior officials with significant financial responsibility’, during the financial year. This figure should include both on-payroll and off-payroll engagements.	12

At 31 March 2023, there were two Board members at National Highways (the CEO and CFO) and 10 other senior officials with significant financial responsibility.

There are no off-payroll engaged workers with significant financial responsibility.

Table 4: Expenditure on consultancy and temporary staff

	Consultancy (£m)	Temporary staff (£m)	Total (£m)
National Highways	2.4	5.6	8.0

During the year, our company employed a number of consultancy and temporary staff. Expenditure on consultancy and temporary staff is shown in the table above.

Consultancy refers to the provision of objective advice relating to strategy, structure, management or operations of an organisation, in pursuit of its purposes and objectives. Such advice will be provided outside the ‘business-as-usual’ environment when in-house skills are not available and will be time-limited. Consultancy may include the identification of options with recommendations or assistance with (but not the delivery of) the implementation of solutions.

Directors’ report

National Highways is the highways authority, traffic authority and street authority for England’s motorways and major A-roads, known collectively as the SRN.

In this section, the Directors present their report on the performance of our company, together with the financial statements and the Auditor’s Report for the financial year ending 31 March 2023.

Our people

The Board

The Board is responsible for the strategy and direction of our company. We set out the Board’s role, composition and responsibilities on pages 205 to 208, as well as corporate governance requirements on composition and roles.

Our people

The commitment of skilled and experienced people is essential to the efficient and effective operation, maintenance and improvement of our network.

The number of employees, as at 31 March 2023, was

6,648

2,321

women

4,219

men

108

undisclosed

These figures exclude secondees and contingent labour.

Gender pay gap and balance

We are committed to developing a diverse and inclusive workforce, and ensuring we are a great place to work. We want to make sure our people reflect the communities we work in by attracting, developing and retaining diverse talent both now and in the future. This will enable us to build an inclusive culture where our people can reach their full potential and be themselves, regardless of their gender, age, race, disability, sexual orientation or social background.

We published our gender pay gap report in March 2023. Our 2021–22 gender pay gap is based on data taken on 31 March 2022, at which point we had 6,103 full-pay relevant employees. Our mean gender pay gap is 6.63%. This compares favourably to the national private sector benchmark of 19.6%, based on the Office of National Statistics' annual survey of hours and earnings. This refers to those who received a normal month's salary, excluding those on long-term sick or parental leave and employees with a change in pay that month.

Read our *Gender pay gap report 2021–2022* here.

Our mean gender pay gap in 2021–22 was:

6.63%

This was down from 6.9% in 2020–21, and under the national private sector benchmark of 19.6%

Gender balance

This year, we took further steps to encourage gender balance, actively supporting our growing internal networks.

These include:

- Access for all (our disability network)
- Armed forces and veterans
- Carers
- Early talent
- Embrace
- Leading women
- Menopause and hormone conditions
- Part-time workers
- Rainbow roads (our LGBT+ network)

We have also focused on attracting apprentices and graduates from a variety of backgrounds, and worked to break down the barriers of a traditionally male-dominated engineering environment.

We know that, with the right initiatives in place, we will be able to further reduce our pay gap and make positive changes to support our people.

We're an organisation with

6,472

full-time equivalent employees

Over the last 12 months

1,121

new starters joined us on our journey

We had a

10%

attrition rate over the last 12 months with employees leaving our organisation

[This graphic provides diversity information for our business.]

Inclusive environment
We are committed to providing an inclusive work environment in which individuals' differences are understood, respected and valued. We have a framework for the actioning of adjustments for people with disabilities to create the right working conditions. We also have a well-established internal disability network, 'Access for all', which helps our people share experiences and work together to address issues.

As of 31 March 2023, 4% declared that they had a disability and 45% declared they had no disability. 46% of employees did not declare their disability status and 4% preferred not to say.

Employee engagement
We engage with our people in a variety of ways. This includes interaction with the Non-Executive Director leading on employee engagement, engagement through employee networks and discussions with trade union representatives.

We share details about the financial performance of our company with all our people at the appropriate time and we provide opportunities for them to give feedback. These include team or shift meetings, directorate events, 'Town hall' events with our Chief Executive and other senior leaders, 'Calling all colleagues' teleconferences and our annual employee engagement survey.

We have provided more information on employee engagement on page 154

Economic crime (including whistleblowing)
We refer to the collective of fraud, bribery, corruption, money laundering and modern slavery as economic crime, and we take any allegation of fraud and impropriety seriously. Our policies and procedures reflect current UK legislation and fully comply with the Cabinet Office's Functional Standards (GovS 013: Counter Fraud).

Most allegations are received through our raising concerns at work (whistleblowing) channels. They are logged and investigated by a professionally trained team. Our detailed approach can be found in our principal risks section on page 201.

As a public sector body, we do not fall within the remit of the regulated sector, as defined by Money Laundering Regulations 2017. However, we apply the regulations in our approach on a best practice basis. Any potential incidents identified by our control framework are reported to the National Crime Agency, in accordance with the Proceeds of Crime Act 2002. This protects us from any legal action taken against the perpetrator.

Our company

Sustainability, corporate responsibility and the environment

We are committed to ensuring that activity on our network does not harm the environment. Our measures to reduce impact on both the built and natural environment can be found in our sustainability report on pages 91 to 114.

Human rights and the Modern Slavery Act

Our supply chain must comply with all legal requirements. We use contractual arrangements and regular meetings to remind our supply chain of the need to comply with all legislation, including the Modern Slavery Act.

Our detailed approach to modern slavery can be found in our principal risks section on page 199, and in our *Anti-slavery and human trafficking statement*.

Payment to our supply chain

We aim to pay our supply chain promptly, with a target of paying at least 98% of supplier invoices within contract terms and at least 80% of invoices within five working days of receipt. We monitor this through the use of project bank accounts and through our financial systems. More detail can be found in our financial review on pages 17 to 24.

Charitable and political contributions

Our company made no charitable or political contributions during 2022–23.

Results, going concern, share capital and dividend

We have prepared our company's financial statements for the reporting period ending 31 March 2023 in accordance with International Financial Reporting Standards rules, as adopted by the EU, and in accordance with applicable law. The audited financial statements for this period are set out on pages 301 to 306.

Our Directors have a reasonable expectation that our company has adequate resources to operate for the foreseeable future. Our viability statement is available on page 200.

The financial statements have been prepared on a going concern basis and note 11 to the financial statements (see page 353) outlines the basis of this view. Our company did not pay a dividend during the financial year.

We are a government-owned, not-for-profit company, incorporated by shares and funded by grant-in-aid. Our sole Shareholder is the Secretary of State for Transport, and the authorised and paid-up share capital is £10. Note 8 of the financial statements highlights the funding our company receives from government through DfT (see page 346).

Our financial statements are consolidated into DfT's group accounts. Once they are laid in Parliament, they will be published on the DfT website.

Disclosures and statements

Directors’ third-party indemnity provisions

We have appropriate Directors’ and Officers’ liability insurance in place to indemnify the Directors or officers/company against loss arising from any claim made against the Directors or officers/company. Our company did not indemnify any Directors during 2022–23.

Conflicts of interest

We have established procedures in place, in accordance with our company’s *Articles of association*, to ensure compliance with our Directors’ conflicts of interest duties within the Companies Act 2006. This includes procedures for dealing with any situation in which a Director may have a direct or indirect interest that conflicts with, or may conflict with, the interests of our company.

At the date of this report, there are no conflicts of interest. It is, however, appropriate to disclose that Kathryn Cearns was (until July 2022) the DfT Special Representative on the Elizabeth Line Committee (Crossrail), and is currently a member of DfT’s Group Audit and Risk Committee.

Directors’ responsibilities statement

Our Directors are responsible for preparing this *Annual report and accounts* in accordance with applicable law and regulations.

Company law requires Directors to prepare the financial statements for each financial year. Under company law, Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs, and profit or loss of our company, for that period.

In preparing the financial statements, Directors are required to:

- select suitable accounting policies and then apply them consistently
- make judgements and accounting estimates that are reasonable and prudent
- state whether applicable International Financial Reporting Standards have been followed, subject to any material departures disclosed and explained in the financial statements
- prepare the financial statements on the going concern basis, unless it is inappropriate to presume that our company will remain in business

Our Directors are responsible for keeping adequate accounting records that are sufficient to show, and explain, our company's transactions and disclose with reasonable accuracy at any time the financial position of our company and viability to ensure that the financial statements comply with the Companies Act 2006. Our Directors are also responsible for safeguarding our company's assets and for taking reasonable steps to prevent and detect fraud and other irregularities.

Each Director, whose name and function are described in this *Annual report and accounts*, has confirmed that to the best of his or her knowledge:

- the financial statements have been prepared in accordance with International Financial Reporting Standards rules, as adopted by the EU, and give a true and fair view of the assets and liabilities, financial position and the profit or loss of our company
- the Directors' report and strategic report include a view of the development and performance of the business and the position of our company, together with a description of the principal risks and uncertainties that our company faces

Our Directors are responsible for the maintenance and integrity of the corporate and financial information included on our company's website.

Our Directors consider that this *Annual report and accounts*, taken as a whole, is fair, balanced and understandable. They consider that it provides the information necessary for our Shareholder to assess our company's position, performance, business model and strategy.

Compliance with the Corporate Governance Code

Information on our company's compliance with the Corporate Governance Code can be found on page 218.

Accounting Officer's responsibilities statement

The Permanent Secretary of DfT appointed Nick Harris as Accounting Officer for our company. The Accounting Officer shares, on an individual basis, many of our Directors' responsibilities listed above. The Accounting Officer also has responsibility for the propriety and regularity of the public finances for which they are answerable, for keeping proper records and for safeguarding our company's assets. These responsibilities are set out in full in *Managing public money*, published by HM Treasury.

Events after year-end

In April 2023, government announced the cancellation of 14 planned smart motorways schemes, 11 already on pause, and three set for construction in the third road period (2025–30).

In May 2023, we announced that our Chairman, Dipesh Shah, would be stepping down later in the year. DfT has begun the process to recruit a replacement.

Sukhvinder Johal joined the Board as the Shareholder-appointed Non-Executive Director on 1 June 2023, and was appointed for a three-year term.

Disclosure of information to auditors

Our company's auditor is the Comptroller and Auditor General.

In so far as each person serving as a Director of our company is aware, at the date of approval of this Directors' report by the Board, there is no relevant audit information (needed by the auditor in connection with preparing their report) that the company's auditor is unaware of.

Each Director confirms that they have taken all the steps necessary as a Director to make themselves aware of any relevant audit information and to establish that our company's auditor is aware of that information.

This report, and its content, are the Board's statement of compliance with our company's Licence and *Framework document* obligations. To the best of the Board's knowledge and belief, having made all reasonable enquiries, the information contained in this document and the accompanying *Performance monitoring statements* are set out appropriately. It also constitutes our company's annual progress report under clause 6.26 of the Licence.

As Accounting Officer, I confirm that to the best of my knowledge and belief, this *Annual report and accounts* as a whole is a fair and balanced reflection of our company's performance this year. I take responsibility for this report and the judgements taken.

The Board approved this Directors' report on 13 July 2023. It is signed by:

[Signature]

Nick Harris, Chief Executive
in his role as Accounting Officer on behalf of the Board

Financial statements

for the year ended 31 March 2023

National Highways Limited ("National Highways" or "the company") is a private company limited by shares, domiciled in the United Kingdom and registered in England and Wales under the Companies Act 2006.

The company is wholly owned by the Secretary of State for Transport.

The company registration number is 09346363.

The registered office of the company is Bridge House, 1 Walnut Tree Close, Guildford, Surrey GU1 4LZ.

The company's principal activities are to operate, maintain and modernise the Strategic Road Network (SRN) in the interests of its customers. National Highways Limited was incorporated on 8 December 2014 and commenced trading on 1 April 2015, following the transfer of assets and liabilities from the Highways Agency. The company name changed from Highways England Company Limited to National Highways Limited on 9 September 2021.

In this section

Independent Auditor’s report to the sole Shareholder of National Highways Ltd and to the Houses of Parliament

for the year ended 31 March 2023

Opinion on financial statements

I have audited the financial statements of National Highways Limited (“the Company”) for the year ended 31 March 2023 which comprise the Company’s:

- Statement of Financial Position as at 31 March 2023;
- Statement of Comprehensive Net Expenditure, Statement of Cash Flows and Statement of Changes in Taxpayers’ Equity for the year then ended; and
- the related notes including the significant accounting policies.

The financial reporting framework that has been applied in the preparation of the financial statements is applicable law and the UK adopted International Accounting Standards.

In my opinion the financial statements:

- give a true and fair view of the state of the Company’s affairs as at 31 March 2023 and of the net expenditure for the year then ended;
- have been properly prepared in accordance with UK adopted International Accounting Standards; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Opinion on regularity

In my opinion, in all material respects the income and expenditure recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Basis for opinions

I conducted my audit in accordance with International Standards on Auditing (UK) (ISAs (UK)), applicable law and Practice Note 10 ‘*Audit of Financial Statements and Regularity of Public Sector Bodies in the United Kingdom (2022)*’. My responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of my report.

Those standards require me and my staff to comply with the Financial Reporting Council's *Revised Ethical Standard 2019*. I am independent of the Company in accordance with the ethical requirements that are relevant to my audit of the financial statements in the UK. My staff and I have fulfilled our other ethical responsibilities in accordance with these requirements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

The framework of authorities described in the table below has been considered in the context of my opinion on regularity.

Framework of Authorities	
Authorising legislation	• Infrastructure Act 2015 • The Delegation of Functions (Strategic Highways Companies) (England) Regulations 2015 • The Licence issued by the Secretary of State for Transport providing statutory directions to the Company
HM Treasury and related authorities	• The Framework Document between the Department for Transport and the Company • HM Treasury guidance, including Managing Public Money, and Cabinet Office Spending Controls, to the extent that they are made applicable to the Company by the Framework

Conclusions relating to going concern

In auditing the financial statements, I have concluded that the Company's use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

My evaluation of the Directors' assessment of the entity's ability to continue to adopt the going concern basis of accounting included a review of the Company's future funding commitments from the Government, particularly those for Road Investment Strategy period 2 (RIS 2) through to 2025, as well as internal budgets, plans and cashflow forecasts.

Based on the work I have performed, I have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In relation to the Company's reporting on how it has applied the UK Corporate Governance Code, I have nothing material to add or draw attention to in relation to the directors' statement in the financial statements about whether the director's considered it appropriate to adopt the going concern basis of accounting.

My responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Overview of my audit approach

Key audit matters

Key audit matters are those matters that, in my professional judgment, were of most significance in the audit of the financial statements of the current period. They include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditor, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of the audit of the financial statements as a whole, and in forming my opinion thereon. I do not provide a separate opinion on these matters.

This is not a complete list of all risks identified though the course of my audit but only those areas that had the greatest effect on my overall audit strategy, allocation of resources and direction of effort. I have not, for example, included information relating to the work I have performed around performed in relation to the presumed risk of management override of controls under International Standard on Auditing (UK) 240, an area where my work has not identified any matters to report.

The key audit matters were discussed with the Audit and Risk Committee; its report on matters that it considered to be significant to the financial statements is set out on pages 246 to 256.

The key audit matters I report on are consistent with those I identified in the prior year.

Valuation of the Strategic Road Network (SRN)
Description of risk The SRN is the largest balance in the accounts (£156.1 billion) as at 31 March 2023. The valuation comprises an estimate of the depreciated replacement cost of the SRN, to reflect its fair value in the absence of income or market-based sources. The estimate is derived from the actual costs of recent schemes, together with records about the number, type, and condition of physical assets.

The SRN valuation contains multiple areas of judgement and estimation uncertainty. I treat this matter as a significant matter for audit because of the inherent complexity and estimation uncertainty. Significant audit effort is involved in addressing risk around asset volumes, costing rates, assumptions, and National Highways' assessment of condition.

The company details the critical judgements and estimates it has made in relation to the SRN at note 6.2 and note 9.1 of the financial statements. Several assumptions are implicit in determining the SRN valuation, the validity of which I review regularly; for example, whether costing rates for material SRN elements remain a reasonable basis for valuing a modern equivalent asset.

As at 31 March 2023, management carried out a quinquennial review (QQR) of structures (net book value of £33.9 billion). The valuation approach was developed by management's expert, which involved an exercise to identify modern equivalent structure assets from recent construction schemes, and to derive cost data for these structures. Cost data was used to generate unit rates based on the structure category and road design type that the structure crosses. The generated unit rates were then compared to the existing unit rates generated in the previous QQR to calculate a single average movement in the unit rates of the structures population. This average movement was then applied to the pre-existing rates to arrive at the final structures valuation.

How the scope of my audit responded to the risk	My procedures on the SRN valuation are geared towards evaluating the reasonableness of management's estimate of its value, to assess: • The quality of source data in the underlying databases; • The reasonableness of costing rates and cost indexation applied in-year; and • The adjustments made in respect of the network's condition based on the available evidence from asset management activities, amongst other key assumptions I engaged an expert to evaluate a sample of road and structure assets to confirm that the condition-based depreciation methodology has been consistently and correctly applied. I also engaged my expert to evaluate the methodology used to revalue structure assets and the reasonableness of unit rates generated as part of the QQR exercise. **Key observations** During the year the SRN valuation increased by £13.0 billion. The main driver of this increase was the increase in the underlying IOPI index adopted for roads, structures and

technology assets.

In auditing the quinquennial revaluation of structures assets, I noted that management had chosen not to perform a full revaluation of their tunnel assets which had a net book value of £2.5 billion, due to a lack of suitable data held by National Highways. The costing rates for these assets have remained unchanged, but indexation has been applied in line with other SRN assets which were not subject to quinquennial review. I am satisfied that this approach would not result in a materially different valuation.

Through my expert's challenge of management's expert, alongside my own testing, I noted that management had used a limited range of costing data in order to perform the QQR of the structures assets. Whilst the underlying data came from a greenfield scheme using modern equivalent assets; the geographical range, structural type and quantity of the data used was limited. While making suggestions for improvement, I am satisfied that the methodology used to revalue structures assets is reasonable and has been appropriately applied.

With the support of my expert, I confirmed that the IOPI index provides a reasonable basis for indexation of the asset in between full revaluations. Through my audit of indexation, I noted that the index applied by management was the Q3 (December 2022) index. The Q4 (March 2023) became available after the reporting period. I evaluated the impact of market volatility on the index between December 2022 and March 2023 and determined that the impact on the asset value was material. Management agreed with me that it was necessary to adjust the indexation to achieve a more relevant year-end estimate. This adjustment increased the value of the SRN by £1.8 billion.

In concluding my wider audit work on the SRN, with the support of my expert, I did not identify any material misstatements in the valuation of the road network recognised and disclosed in the financial statements.

Provisions for land and property purchases

Description of risk

The Company recognised provisions for land and property acquisition of £405.8 million as at 31 March 2023. These relate to the estimated cost of planning blight, discretionary and compulsory acquisition of property and compensation for property owners arising from physical construction of road schemes.

The balance has significantly increased from the prior year (£296.1 million as at 31 March 2022), due to a number of significant schemes moving to the next stage of recognition.

As the underlying land cost estimate valuations present an element of significant inherent judgement and estimation uncertainty, this area is treated as a significant matter for the audit. Further information on the accounting for land and property purchases is included in notes 7.4 and 9.4 of the financial statements.

How the scope of my audit responded to the risk

I performed the following procedures over the provisions for land and property purchases balance:

- reviewed the accounting treatment of provisions and contingent liabilities against IAS 37;
- challenged the appropriateness of management's recognition point for acquisition provisions;
- challenged the reasonableness of significant write-backs;
- engaged an auditor's expert to evaluate a sample of underlying land and property valuations; and
- tested a sample of provisions at year end to agree the valuation and existence of the provision to supporting documentation.

Key observations

In my sample testing, I noted that manual entry errors had been made on the provisions system. Calculations had been carried out incorrectly or omitted by management, or details had been entered incorrectly by management's expert. I also noted some instances where valuations had not been updated within 6 months, which is outside of the official policy. One of the provisions sampled which should have been closed by the Company

	was still open at year-end. I extrapolated the errors found within my testing over the provisions balance and found the extrapolated error to be significantly below my materiality threshold. While making some suggestions for improvement, my expert was satisfied that the valuations selected for their review were reasonable following their challenge of management's expert. I did not identify any material misstatements in the provisions balance recognised and disclosed in the financial statements.

Valuation of capital accruals

Description of risk

Where work has been performed by the Company or its contractors by the year end, but an invoice has not been raised, the company raises an accrual for the expected costs. The largest balances relating to accruals relate to capital investment in the road network, for example on renewals and enhancement projects.

The Company expects to be well informed about these costs, but there remains a level of estimation at the year-end about the amount of work delivered. This may differ from plan, for example as a result of unexpected under or over-delivery by the Company's contractors. Both controllable factors (such as contractor project management) and uncontrollable factors (such as ground conditions and weather) provide a level of estimation uncertainty which the Company addresses through a post Balance Sheet review exercise focused on higher-value accruals.

These factors are part of the estimation uncertainty outlined by the Company under the comments concerning cost of work done in the 'Critical accounting judgements and key sources of uncertainty' section in note 9.2. While I assess the risk of material misstatement arising from this uncertainty to be less severe than in the other areas noted above, the audit of accruals nevertheless involves significant audit effort responsive to the risk.

How the scope of my audit responded to the risk	I substantively tested the accruals balance using a stratified sample testing approach. This allowed me to focus testing on higher value accruals and to split resource and capital accruals. This was based on my assessment of the criteria driving risk. For example, I aligned my value threshold for my stratified sample on capital accruals with the threshold

	above which management had performed additional review. **Key observations** My testing of capital accruals identified valuation differences between the evidence available and book value in the draft accounts, which derives from estimates made around the year end by relevant project teams, subject to checking on larger balances by the central finance team. Multiple root causes were involved, including an inaccurate assessment of work completed at year end or not using the most up to date figure of expenditure to date in the accrual calculation. I tested an additional sample of capital accruals due to a higher than expected level of error in the original sample. Testing this additional sample allowed me to increase the precision of my error estimate. By extrapolating the results of my sample testing, including the additional sample, across the capital accruals population, I was able to gain sufficient assurance that the accruals balance was not materially misstated.

Application of materiality

Materiality

I applied the concept of materiality in both planning and performing my audit, and in evaluating the effect of misstatements on my audit and on the financial statements. This approach recognises that financial statements are rarely absolutely correct, and that an audit is designed to provide reasonable, rather than absolute, assurance that the financial statements are free from material misstatement or irregularity. A matter is material if its omission or misstatement would, in the judgement of the auditor, reasonably influence the decisions of users of the financial statements. My materiality judgements are similar to those made in the prior year.

Based on my professional judgement, I determined overall materiality for the Company's financial statements at £1.4 billion, which is approximately 1% of the prior year SRN balance. This was derived at the audit planning stage, and given that the SRN balance had increased in-year, I prudently maintained my materiality base as the prior year benchmark despite upward revaluations which appear in the final accounts. I chose this benchmark given users' interest in the Company's performance in managing and enhancing the network and providing service potential for road users. I have deemed non-SRN property, plant and equipment to be subject to this materiality given that the key assets in those classes, such as motorway service locations, have a function closely linked with the SRN.

Given that such a large element of the infrastructure asset is brought forward and reflects non-cash entries, and the additional user interest I assess in respect of the taxpayer-funded costs of the Company's activities, I have deemed that misstatements of a lesser amount than overall materiality could influence the decisions of users of the accounts in some areas. I have therefore applied a secondary threshold for materiality applied to all transactions and balances that reflect cash spending, including SRN capital additions. I have determined that the level to be applied to these components is £69.0 million, being approximately 1.50% of the Company's total adjusted prior year expenditure, calculated by adjusting net expenditure to exclude non-cash costs such as depreciation and impairment, and to include capital additions. This was derived at the audit planning stage and given that the equivalent expenditure position was marginally higher at the end of the year, I prudently maintained my materiality base as the prior year benchmark.

Performance Materiality

I set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole.

Against my overall materiality level, I set performance materiality at 70% of materiality for the 2022–23 audit (2021–22: 85%). In determining performance materiality, I have considered the uncorrected misstatements identified in the previous period and the complexity and estimation involved in the quinquennial revaluation of the structures element of the SRN during the financial year.

Against my secondary materiality threshold, I have set performance materiality at 75% for the 2022–23 audit (2021–22: 85%). In determining performance materiality, I have considered the lower level of error in the previous period in transactions and balances not related to the SRN.

Other Materiality Considerations

Apart from matters that are material by value (quantitative materiality), there are certain matters that are material by their very nature and would influence the decisions of users if not corrected. Such an example is any errors reported in the Related Parties note in the financial statements. Assessment of such matters needs to have regard to the nature of the misstatement and the applicable legal and reporting framework, as well as the size of the misstatement.

I applied the same concept of materiality to my audit of regularity. In planning and performing audit work to support my opinion on regularity and in evaluating the impact of any irregular transactions, I considered both quantitative and qualitative aspects that would reasonably influence the decisions of users of the financial statements.

Error Reporting Threshold

I agreed with the Audit and Risk Committee that I would report to it all uncorrected misstatements identified through my audit in excess of £300,000, as well as differences below this threshold that in my view warranted reporting on qualitative grounds. I also report to the Audit and Risk Committee on disclosure matters that I identified when assessing the overall presentation of the financial statements

Total unadjusted audit differences reported to the Audit and Risk Committee would have increased net assets and decreased net expenditure by £661,000.

Audit scope

The scope of my audit was determined by obtaining an understanding of the Company and its environment, including the entity wide controls, and assessing the risks of material misstatement.

Other Information

The other information comprises the information included in the Annual Report, but does not include the financial statements and my auditor’s report thereon. The directors are responsible for the other information.

My opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in my report, I do not express any form of assurance conclusion thereon.

My responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If I identify such material inconsistencies or apparent material misstatements, I am required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact.

I have nothing to report in this regard.

Opinion on other matters prescribed by the Companies Act 2006

In my opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements;
- the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements;
- the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements;
- the information about internal control and risk management systems in relation to financial reporting processes, and about share capital structures, in compliance with rules 7.2.5 and 7.2.6 in the Disclosure Rules and Transparency Rules sourcebook made by Financial Conduct Authority (the FCA Rules), is consistent with the financial statements and has been prepared in accordance with applicable legal requirements; and
- Information about the Company corporate governance code and practices and about its administrative, management and supervisory bodies and their committees complies with rules 7.2.2, 7.2.3 and 7.2.7 of the FCA Rules.

Opinion on other matters

In my opinion the part of the Remuneration Committee Report to be audited has been properly prepared in accordance with HM Treasury's Financial Reporting Manual.

Matters on which I report by exception

In the light of the knowledge and understanding of the Company and its environment obtained in the course of the audit, I have not identified material misstatements in:

- the Strategic Report or the Directors' Report; or
- the information about internal control and risk management systems in relation to financial reporting processes and about share capital structures, given in compliance with rules 7.2.5 and 7.2.6 of the FCA rules.

I have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires me to report to you if, in my opinion:

- adequate accounting records have not been kept or returns adequate for my audit have not been received from branches not visited by my staff; or
- I have not received all of the information and explanations I require for my audit; or
- the financial statements and the parts of the Remuneration Committee Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of director’s remuneration specified by law are not made; or
- a corporate governance statement has not been prepared by the company; or

Corporate governance statement

I review the Directors’ statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to the Company’s compliance with the provisions of the UK Corporate Governance Code specified for my review.

Based on the work undertaken as part of my audit, I have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements or my knowledge obtained during the audit:

- Directors’ statement with regards the appropriateness of adopting the going concern basis of accounting and any material uncertainties identified set out on page 278;
- Directors’ explanation as to its assessment of the entity’s prospects, the period this assessment covers and why the period is appropriate set out on page 200;
- Directors’ statement on fair, balanced and understandable set out on pages 219 and 281;
- Board’s confirmation that it has carried out a robust assessment of the emerging and principal risks set out on pages 246 to 256;
- The section of the annual report that describes the review of effectiveness of risk management and internal control set out on pages 246 to 256; and
- The section describing the work of the Audit and Risk Committee set out on pages 246 to 256.

Responsibilities of the Directors for the financial statements

As explained more fully in the Directors' Responsibilities Statement, the directors are responsible for:

- maintaining proper accounting records;
- providing the C&AG with access to all information of which management is aware that is relevant to the preparation of the financial statements such as records, documentation and other matters;
- providing the C&AG with additional information and explanations needed for his audit;
- providing the C&AG with unrestricted access to persons within the Company from whom the auditor determines it necessary to obtain audit evidence.
- preparing financial statements, which give a true and fair view, in accordance with the Companies Act 2006;
- ensuring such internal controls are in place as directors determine is necessary to enable the preparation of financial statement to be free from material misstatement, whether due to fraud or error;
- preparing the Annual Report in accordance with the Companies Act 2006; and
- assessing the Company 's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

My responsibility is to audit and report on the financial statements in accordance with the applicable law and International Standards on Auditing (UK) (ISAs (UK).

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a report that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Extent to which the audit was considered capable of detecting non-compliance with laws and regulations including fraud[1]

I design procedures in line with my responsibilities, outlined above, to detect material misstatements in respect of non-compliance with laws and regulations, including fraud. The extent to which my procedures are capable of detecting non-compliance with laws and regulations, including fraud is detailed below.

Identifying and assessing potential risks related to non-compliance with laws and regulations, including fraud

In identifying and assessing risks of material misstatement in respect of non-compliance with laws and regulations, including fraud, I:

- considered the nature of the sector, control environment and operational performance including the design of the Company's accounting policies, key performance indicators and performance incentives.
- inquired of management, the Company's Head of Internal Audit and those charged with governance, including obtaining and reviewing supporting documentation relating to the Company's policies and procedures on:
  - identifying, evaluating and complying with laws and regulations;
  - detecting and responding to the risks of fraud; and
  - the internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations including the Company's controls relating to the Company's compliance with the Companies Act 2006.
- inquired of management, the Company's head of internal audit and those charged with governance whether:
  - they were aware of any instances of non-compliance with laws and regulations; and
  - they had knowledge of any actual, suspected, or alleged fraud.
- discussed with the engagement team and the relevant internal and external specialists, including in asset valuation and IT audit specialists, regarding how and where fraud might occur in the financial statements and any potential indicators of fraud.

[1] This heading, Identifying and assessing potential risks related to non-compliance with laws and regulations, including fraud, Audit response to identified risk and Other auditor responsibilities are SUB-headings under the general auditor's responsibility section of the certificate/ report. It is important the final version is compliant with this formatting

As a result of these procedures, I considered the opportunities and incentives that may exist within the Company for fraud and identified the greatest potential for fraud in the following areas: revenue recognition, posting of unusual journals, complex transactions, and bias in management estimates including year-end accruals. In common with all audits under ISAs (UK), I am also required to perform specific procedures to respond to the risk of management override.

I obtained an understanding of the Company's framework of authority and other legal and regulatory frameworks in which the Company operates. I focused on those laws and regulations that had a direct effect on material amounts and disclosures in the financial statements or that had a fundamental effect on the operations of the Company. The key laws and regulations I considered in this context included the Companies Act 2006, employment law, tax legislation, and other authorities reflected in the "Framework of Authorities" section above.

Audit response to identified risk

To respond to the identified risks resulting from the above procedures:

- I reviewed the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described above as having direct effect on the financial statements;
- I enquired of management, the Audit and Risk Committee and in-house legal counsel concerning actual and potential litigation and claims;
- I reviewed minutes of meetings of those charged with governance and the Board and internal audit reports; and
- in addressing the risk of fraud through management override of controls, I tested the appropriateness of journal entries and other adjustments; assessed whether the judgements made on estimates are indicative of a potential bias; and evaluated the business rationale of any significant transactions that are unusual or outside the normal course of business.

I communicated relevant identified laws and regulations and potential risks of fraud to all engagement team members including internal specialists and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

A further description of my responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of my report.

Other auditor's responsibilities

I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control I identify during my audit.

[Signature]

Sarah Che (Senior Statutory Auditor)
13 July 2023

For and on behalf of the
Comptroller and Auditor General (Statutory Auditor)
National Audit Office
157–197 Buckingham Palace Road
Victoria
London
SW1W 9SP

Contents of the financial statements

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Risk

Unrecognised items

Other information

Statement of comprehensive net expenditure for the year ended 31 March 2023

	Note	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Staff costs	3	160,388	154,182
Maintenance and similar activities		566,331	545,457
Interest on PFI finance leases	7.5.2	89,983	95,550
PFI service charges	7.5.3	351,365	315,017
Depreciation and amortisation	6.1 & 6.4	1,206,517	1,017,487
Impairment	6.1 & 6.5	119,929	107,943
Loss on sale of assets including detrunking	6.2	5,288	81,516
Other expenditure	4	144,560	158,283
Operating income	2	(70,184)	(109,727)
Net expenditure before taxation		**2,574,177**	**2,365,708**
Taxation charge	5	–	–
Net expenditure after taxation		**2,574,177**	**2,365,708**
Other comprehensive net expenditure			
Items that will not be reclassified to net expenditure			
Net gain on remeasurement of property, plant and equipment	6.2	(11,185,763)	(9,530,235)
Total comprehensive expenditure (income) for the period		**(8,611,586)**	**(7,164,527)**

The accounting policies and notes on pages 307 to 367 form part of these accounts.

Statement of financial position as at 31 March 2023

	Note	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Non-current assets:			
Property, plant and equipment	6.1	157,032,250	143,860,052
Intangible assets	6.4	33,135	33,719
Trade and other receivables	7.2	7,661	10,476
Total non-current assets		**157,073,046**	**143,904,247**
Current assets:			
Assets classified as held for sale	6.5	10,716	11,458
Inventories	6.6	49,006	31,440
Trade and other receivables	7.2	258,820	234,746
Cash and cash equivalents	7.1	(28,025)	39,845
Total current assets		**290,517**	**317,489**
Total assets		**157,363,563**	**144,221,736**
Current liabilities:			
Trade and other payables	7.3	1,021,374	1,040,517
Provisions	7.4	173,872	139,774
Total current liabilities		**1,195,246**	**1,180,291**
Non-current assets less net current liabilities		**156,168,317**	**143,041,445**
Non-current liabilities:			
Provisions	7.4	245,406	179,753
Other payables	7.3	1,157,194	1,256,561
Total non-current liabilities		**1,402,600**	**1,436,314**
Assets less liabilities		**154,765,717**	**141,605,131**

	Note	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Taxpayers' equity:			
Share capital		–	–
Capital contributions		50,381,139	50,221,215
Retained earnings		12,330,731	10,355,908
Revaluation reserve		92,053,847	81,028,008
Total taxpayers' equity		**154,765,717**	**141,605,131**

The accounting policies and notes on pages 307 to 367 form part of these accounts.

The issued share capital of the company is £10, as detailed in note 8.

These financial statements were approved and authorised for issue by the Board of Directors on 13 July 2023, and were signed on its behalf by:

[Signature]

Nick Harris, Chief Executive
Company registered number: 9346363

Statement of cash flows for the year ended 31 March 2023

	Note	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Cash flows from operating activities			
Net operating cost		(2,574,177)	(2,365,708)
Adjustments for non-cash transactions:			
Depreciation and amortisation	6.1 & 6.4	1,206,517	1,017,487
Loss on sale of fixed assets		5,288	81,516
Net increase in resource provisions	7.4	(8,323)	15,658
Programme impairments		119,929	107,943
Interest on leases	7.5.1	1,024	959
(Increase)/decrease in inventories	6.6	(17,566)	9,105
(Increase)/decrease in trade and other receivables	7.2	(21,259)	13,358
Increase/(decrease) in trade and other payables	7.3	(118,510)	(64,439)
Less movement in payables relating to items not passing through the SoCNE	7.5.1	(8,635)	5,075
Use of capital provisions	7.4	(57,456)	(72,121)
Use of resource provisions	7.4	(1,616)	(6,342)
Adjustment for capital element of PFI payments	7.5.2	91,998	86,432
Net cash outflow from operating activities		**(1,382,786)**	**(1,171,077)**
Cash flows from investing activities			
Purchase of property, plant and equipment	6.1	(3,324,567)	(3,071,169)
Non-cash movement on creation of IFRS 16 asset		28,779	4,785
Proceeds on disposal of assets		7,723	5,705
Capital element of movement in provisions	7.4	167,146	(83,731)
Net cash outflow from investing activities		**(3,120,919)**	**(3,144,410)**

Cash flows from financing activities			
Capital contribution from shareholder: current year		4,549,000	4,466,000
Capital element of payments in respect of on balance sheet PFI contracts	7.5.2	(91,998)	(86,432)
Payment of lease liabilities	7.5.1	(21,167)	(10,819)
Net financing		**4,435,835**	**4,368,749**
Net (decrease)/increase in cash and cash equivalents in the year		**(67,870)**	**53,262**
Cash and cash equivalents at the beginning of the year	7.1	**39,845**	**(13,417)**
Cash and cash equivalents at the end of the year	7.1	**(28,025)**	**39,845**

Statement of changes in taxpayers' equity for the year ended 31 March 2023

	Note	Capital contributions £000	Retained earnings £000	Revaluation reserve £000	Total equity £000
Balance at 1 April 2021		**50,100,497**	**8,255,616**	**71,618,491**	**129,974,604**
Changes in taxpayers' equity for 2021–22					
Net (loss)/gain on remeasurement of property, plant and equipment		(2,574)	–	9,532,809	9,530,235
Transfers between reserves		123,292	–	(123,292)	–
Net comprehensive expenditure after taxation for the year		–	**(2,365,708)**	**–**	**(2,365,708)**
Total recognised income and expenditure for the year ended 31 March 2022		**50,221,215**	**5,889,908**	**81,028,008**	**137,139,131**
Funding from Shareholder		–	4,466,000	–	4,466,000
Balance at 31 March 2022		**50,221,215**	**10,355,908**	**81,028,008**	**141,605,131**
Changes in taxpayers' equity for 2022–23					
Net (loss)/gain on remeasurement of property, plant and equipment	6.2.iii.b	–	–	11,185,763	11,185,763
Transfers between reserves		159,924	–	(159,924)	–
Net comprehensive expenditure after taxation for the year		–	(2,574,177)	–	(2,574,177)
Total recognised income and expenditure for the year ending 31 March 2023		**50,381,139**	**7,781,731**	**92,053,847**	**150,216,717**
Funding from Shareholder		–	4,549,000	–	4,549,000
Balance at 31 March 2023		**50,381,139**	**12,330,731**	**92,053,847**	**154,765,717**

Notes to the financial statements

1. Significant changes in the current period

There were no significant events or transactions that particularly affected the financial position and performance of the company during the reporting period.

For a review of the company's performance and financial position please see the financial summary on pages 17 to 24.

To understand how our funding ties into our financial accounts see note 23.

2. Operating income

Operating income relates directly to the operating activities of the company and arises from:

- **recoveries from third parties** for damage to the Strategic Road Network (SRN);
- **third party contributions** to road schemes;
- **fees and charges** for work carried out on a full-cost basis to external customers in both the public and private sectors;
- **other income** relating to income from short-term lettings, income from vehicle recoveries on the network, grant income and Memorandum of Understanding (MOU) income received from government departments for the use of office space.

	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Operating income analysed by classification and activity is as follows:		
Recoveries from third parties for damage to the SRN	(21,587)	(19,459)
Contribution to road schemes	(8,577)	(47,862)
Fees and charges to external customers	(12,220)	(20,439)
Other income	(27,800)	(21,967)
Total operating income	**(70,184)**	**(109,727)**

The revenue recognition principles for each of the major revenue streams are outlined below and, while the company does not have customers in the traditional sense, it has applied the principles of IFRS 15 (revenue recognition) where relevant as a matter of good practice.

- **Recovery from third parties for damage to the SRN.** The company considers that past events involving damage to the network initially create a contingent asset under IAS 37 (provisions, contingent liabilities and contingent assets), since they create a situation whereby a reimbursement by the offending party is probable. Income (and a receivable) is recognised at the point at which an insurance company decides that they will make a payment, as it is then considered that reimbursement is virtually certain.
- **Contribution to road schemes** relates to contributions to projects from third parties. Contributions are received from developers or local authorities who require us to tailor our schemes in line with the needs of their own development projects. Revenue fluctuates dependent upon the number and size of developments taking place alongside our programme and is apportioned based upon the percentage of construction completed. This aligns with accounting standards which requires income to be systematically recognised over a period to match it with related costs.
- **Fees and charges to external customers** relate to contributions to schemes from third parties under S274/278 contracts (where external individuals, groups or entities wish to enhance or extend the existing network. For example, works could include the construction of a new slip road onto the road network). Revenue in relation to this type of contract is received in advance and is then held as deferred income until costs are incurred to fulfil the contract. The treatment of this revenue is consistent with IFRS 15 section 35(b), whereby revenue is recognised over time as the asset is created or enhanced.
- **Other income** relates to various less material revenue streams including: income relating to vehicle recovery; short-term property lettings; grant income and income from MOU agreements with government departments. Operating income is stated net of recoverable VAT and is measured at the fair value of the consideration received or receivable.

3. Staff numbers and related costs

3.1. Staff costs

	Year to 31 March 2023			Year to 31 March 2022
	Permanent staff £000	Other £000	Total £000	Total £000
Wages and salaries	270,120	5,922	276,042	256,722
Social security costs	30,705	–	30,705	27,968
Other pension costs	38,184	–	38,184	37,196
Total gross costs	**339,009**	**5,922**	**344,931**	**321,886**
Capitalised staff costs	(181,208)	(3,222)	(184,430)	(167,704)
Less recoveries in respect of outward secondments	(113)	–	(113)	–
Total net costs	**157,688**	**2,700**	**160,388**	**154,182**

Permanent staff are those staff with a permanent or fixed-term employment contract with the company. Other relates to contingent labour.

Wages and salaries includes gross salaries, performance pay or bonuses, overtime, recruitment and retention allowances, ex-gratia payments and any other taxable allowances or payments, as well as costs relating to agency, temporary and contract staff engaged by the company on a contract to undertake a project or task.

Salaries, wages and employment-related payments are recognised in the period in which the service is received from employees.

Total gross staff costs have increased by £23 million (7%) due to growth in FTEs and the annual pay award.

Performance-related bonuses

At the year end, each employee’s performance has not been formally assessed and consequently the pay increases and bonus payments for the year to 31 March are not yet known. However, the work has been completed and therefore a liability is created. The value of the bonuses to be paid is estimated and accrued based on all information that is available including: company performance forecasts, previous employee performances and performance-related pay scheme details. This is in accordance with accounting standard IAS 19 (employee benefits).

Holiday pay

Employees of the company have different holiday leave year-end dates based upon their date of employment. As leave is used during the year at different times compared to a straight line accrual, at 31 March there is an element of leave that is owed either by the company to employees or owed by employees to the company. The cost of leave earned but not taken by employees is recognised in the financial statements.

Termination

Termination benefits are amounts payable as a result of a decision by the company to terminate employment before the normal retirement date, or a decision by an employee to accept voluntary redundancy. Amounts payable are charged on an accruals basis to staff costs in net expenditure when the company is formally committed to ending an employment contract.

3.2 National Highways off-payroll appointees, consultancy and temporary staff

As part of the review of tax arrangements of public sector appointees published by the Chief Secretary to the Treasury on 23 May 2012, departments and their arm's length bodies have been asked to report on their off-payroll engagements and related tax arrangements for the periods and scope outlined by HM Treasury. This data is shown in the following tables:

Table 1: For all off-payroll engagements as of 31 March 2021, for more than £245 per day and that last for longer than six months

No. of existing engagements as of 31 March 2023	15
Of which:	
No. that have existed for less than one year at time of reporting.	14
No. that have existed for between one and two years at time of reporting.	–
No. that have existed for between two and three years at time of reporting.	1
No. that have existed for between three and four years at time of reporting.	–
No. that have existed for four or more years at time of reporting.	–

The company confirms that all existing off-payroll engagements, outlined above, have at some point been subject to a risk-based assessment as to whether assurance is required that the individual is paying the right amount of tax and, where necessary, that further evidence has been sought.

Table 2: For all new off-payroll engagements, or those that reached six months in duration, between 1 April 2022 and 31 March 2023, for more than £245 per day and that last for longer than six months

No. of new engagements, or those that reached six months in duration, between 1 April 2022 and 31 March 2023	20
Of which:	
No. assessed as caught by IR35.	20
No. assessed as not caught by IR35.	–
No. engaged directly (via PSC contracted to department) and are on the departmental payroll.	–
No. of engagements reassessed for consistency/assurance purposes during the year.	–
No. of engagements that saw a change to IR35 status following a consistency review.	–

There were a total of 15 off-payroll engagements that existed as at 31 March 2023.

There were a total of 20 new engagements that joined National Highways between 1 April 2022 and 31 March 2023, who will be with us longer than six months and will earn over £245 per day.

All contracts included contractual clauses giving the company and the Department the right to request assurance. All engagements were ones where the Department requested tax compliance evidence and there were no contracts where an individual was exempt from this requirement.

Table 3: For any off-payroll engagements of Board members and/or senior officials with significant financial responsibility, between 1 April 2022 and 31 March 2023

No. of off-payroll engagements of Board members and/or senior officials with significant financial responsibility, during the financial year.	–
Total no. of individuals on-payroll and off-payroll that have been deemed 'Board members and/or senior officials with significant financial responsibility', during the financial year. This figure should include both on-payroll and off-payroll engagements.	12

At 31 March 2023 there were two Board members at NH (the CEO and CFO) and 10 other senior officials with significant financial responsibility.

There are no off-payroll engaged workers with significant financial responsibility.

Table 4: Expenditure on consultancy and temporary staff

	Consultancy (£m)	Temporary staff (£m)	Total (£m)
National Highways	2.4	5.6	8.0

During the year the company employed a number of consultancy and temporary staff. Expenditure on consultancy and temporary staff is shown in the table above (Table 4).

Consultancy here is the provision of objective advice relating to strategy, structure, management or operations of an organisation, in pursuit of its purposes and objectives. Such advice will be provided outside the ‘business-as-usual’ environment when in-house skills are not available and will be time-limited. Consultancy may include the identification of options with recommendations, or assistance with (but not the delivery of) the implementation of solutions.

4. Other expenses

	Note	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Information technology		75,651	61,216
Research and development expenditure		13,887	12,456
Rates and building costs		26,284	21,772
Provisions expenditure	7.4	(12,817)	16,186
Rent		2,831	2,894
Interest under IFRS 16	7.5.1	1,024	959
Travel and subsistence		3,346	1,655
Traffic management vehicle costs		5,333	4,967
Recruitment and training		8,711	9,153
Consultancy		2,387	3,946
Communication		71	559
Stationery		726	725
Other		17,126	21,795
Total		**144,560**	**158,283**

Information technology costs have increased by £14.4 million, with the highest expenditure on software purchases, hardware and software maintenance.

There has been a decrease in provisions expenditure due to a third-party claim being settled substantially below the provision value.

Travel and subsistence expenditure increased as staff continue to travel more following the change to working patterns neccesitated due to Covid-19.

Excluding VAT, the auditor fee of the Comptroller and Auditor General for the year ending 31 March 2023 is £420,000 (2021–22 £407,200), and is in relation to the audit of the 2022–23 financial statements of National Highways £347,000 (2021–22 £333,500); and Dartford-Thurrock River Crossing Charging Scheme £73,000 (2021–22 £73,700). This amount is included in ‘Other’ above.

Expenditure on research is not capitalised. Development expenditure that does not meet criteria for capitalisation is also treated as an expense and shown in net expenditure in the year in which it is incurred.

5. Corporation tax

From a corporation tax perspective, the company is not trading with a view to a profit and the contributions received from DfT in relation to the company's principal activity of managing England's strategic road network are not chargeable to Corporation Tax.

The company is only liable for corporation tax in relation to income earned from business activities. Business activities for the company are non-statutory obligations where the company is in competition with other providers. Income from business activities includes sale of properties purchased as part of road schemes.

National Highways currently has only two corporation taxable activities: interest and rental property income. We have made a small taxable income this year but it is offset by in-year losses.

	Year to 31 March 2023 £000	Year to 31 March 2022 £000
a) Analysis of the tax charge/(credit)		
Current taxation		
UK Corporation Tax	–	–
Adjustments in respect of prior years	–	–
	–	–
b) Factors affecting the tax (credit)/charge for the year		
The effective rate of tax for the period is less than the standard rate of Corporation Tax in the UK of 19% (2021–22 19%)		
The differences are explained below:		
Net expenditure on ordinary activities	(2,574,177)	(2,365,708)
Net expenditure on ordinary activities multiplied by standard rate of Corporation Tax in the UK of 19% (2021–22 19%)	(489,094)	(449,485)
Effect of:		
Income and expenditure not subject to Corporation Tax	489,094	449,485
	–	–

Tax on the profit or loss for the year comprises current and deferred tax. Tax is recognised in net expenditure except to the extent that it relates to items recognised in equity, in which case it is recognised in equity.

Current tax is the expected tax payable or receivable on the current taxable income or loss for the year, using tax rates enacted at the balance sheet date and any adjustment to tax payable in relation to previous years.

The current corporation tax rate is 19% which came into effect from 1 April 2017.

The company has no deferred tax as business activity is minimal.

6. Non-financial assets and liabilities

This note provides information about the company's non-financial assets and liabilities. This covers:

- Property, plant and equipment (both SRN and non SRN)
- Intangible assets
- Assets held for sale
- Inventory

Employee benefit obligations are captured within the staff costs in note 3.

Property, plant and equipment is sub-categorised into:

- The Strategic Road Network – This consists of the motorways and trunk roads in England (as depicted by the network management map), which form a single integrated network and includes assets under construction (AUC).
- Non-network assets (NNFA) – These include land, buildings and information technology outside the SRN's perimeter, as well as all plant and machinery and assets held under leases as defined by IFRS 16.

6.1. Property, plant and equipment

2022–23

	SRN and related AUC £000	Non-SRN AUC £000	Land £000	Buildings £000	Dwellings £000	Plant and machinery £000	Information technology £000	Leased assets £000	Total £000
Cost or valuation									
At 1 April 2022	**160,612,826**	**225,460**	**263,004**	**94,668**	**124,454**	**256,758**	**10,598**	**83,986**	**161,671,754**
Leases recognised under new standard	–	–	–	–	–	–	–	–	**–**
Capital additions	3,077,564	218,178	–	–	–	–	–	28,825	**3,324,567**
Disposals	(10,375)	–	(752)	–	–	(50,754)	(2,503)	(7,343)	**(71,727)**
Revaluation	11,381,175	553	17,065	12,678	7,986	17,930	280	–	**11,437,667**
Impairment – charged to SoCNE	–	(119,429)	–	–	–	(9,814)	–	–	**(129,243)**
Impairment – charged to revaluation reserve	–	–	–	–	–	(135)	–	–	**(135)**
Reclassification	(20,692)	(76,236)	3,705	18,601	26,314	37,824	2,217	(868)	**(9,135)**
At 31 March 2023	**175,040,498**	**248,526**	**283,022**	**125,947**	**158,754**	**251,809**	**10,592**	**104,600**	**176,223,748**
Depreciation and impairment									
At 1 April 2022	17,559,984	–	–	53,399	–	161,026	8,611	28,682	**17,811,702**
Charged in year	1,158,200	–	–	4,222	–	20,808	2,272	12,867	**1,198,369**
Disposals	(2,250)	–	–	–	–	(49,995)	(2,258)	(5,888)	**(60,391)**
Revaluation	240,716	–	–	2,060	–	8,714	279	–	**251,769**
Reclassification	–	–	–	–	–	–	–	–	**–**
Impairment – charged to SoCNE	–	–	–	–	–	(9,951)	–	–	**(9,951)**
At 31 March 2023	**18,956,650**	**–**	**–**	**59,681**	**–**	**130,602**	**8,904**	**35,661**	**19,191,498**

Net book value									
At 1 April 2022	**143,052,842**	**225,460**	**263,004**	**41,269**	**124,454**	**95,732**	**1,987**	**55,304**	**143,860,052**
At 31 March 2023	**156,083,848**	**248,526**	**283,022**	**66,266**	**158,754**	**121,207**	**1,688**	**68,939**	**157,032,250**

2021–22

	SRN and related AUC £000	Non-SRN AUC £000	Land £000	Buildings £000	Dwellings £000	Plant and machinery £000	Information technology £000	Leased assets £000	Total £000
Cost or valuation									
At 1 April 2021	**148,069,268**	**193,454**	**229,287**	**102,155**	**110,433**	**209,598**	**11,242**	**77,636**	**149,003,073**
Leases recognised under new standard	–	–	–	–	–	–	–	–	**–**
Capital additions	2,858,847	206,841	–	–	–	–	–	5,481	**3,071,169**
Disposals	(86,030)	–	(286)	(14,247)	(839)	(15,887)	(576)	–	**(117,865)**
Revaluation	9,787,029	3,030	23,123	6,986	10,790	32,122	–	–	**9,863,080**
Impairment – charged to SoCNE	–	(103,875)	–	(1,074)	–	(1)	(161)	–	**(105,111)**
Impairment – charged to revaluation reserve	–	–	(116)	(167)	–	(1)	(18)	–	**(302)**
Reclassification	(16,288)	(73,990)	10,996	1,015	4,070	30,927	111	869	**(42,290)**
At 31 March 2022	**160,612,826**	**225,460**	**263,004**	**94,668**	**124,454**	**256,758**	**10,598**	**83,986**	**161,671,754**
Depreciation and impairment									
At 1 April 2021	16,284,642	–	–	57,070	–	138,550	6,916	19,154	**16,506,332**
Charged in year	987,024	–	–	1,685	–	10,403	2,327	9,528	**1,010,967**
Disposals	(15,758)	–	–	(5,543)	–	(15,819)	(483)	–	**(37,603)**
Revaluation	304,076	–	–	586	–	27,894	–	–	**332,556**
Impairment – charged to SoCNE	–	–	–	(387)	–	(1)	(149)	–	**(537)**

Impairment – charged to revaluation reserve	–	–	–	(12)	–	(1)	–	–	**(13)**
At 31 March 2022	**17,559,984**	**–**	**–**	**53,399**	**–**	**161,026**	**8,611**	**28,682**	**17,811,702**
Net book value									
At 1 April 2021	**131,784,626**	**193,454**	**229,287**	**45,085**	**110,433**	**71,048**	**4,326**	**58,482**	**132,496,741**
At 31 March 2022	**143,052,842**	**225,460**	**263,004**	**41,269**	**124,454**	**95,732**	**1,987**	**55,304**	**143,860,052**

6.2. Strategic road network (SRN)

	Roads £000	Land £000	Structures £000	Technology £000	AUC £000	Total £000
Cost						
At 1 April 2022	**90,859,122**	**14,921,447**	**48,583,557**	**3,520,412**	**2,728,288**	**160,612,826**
Capital additions	650,887	–	175,987	–	2,250,690	3,077,564
Revaluation	10,925,694	1,537,957	396,933	462,653	(1,942,062)	11,381,175
Disposal and derecognition	–	–	(10,375)	–	–	(10,375)
Reclassifications	259,109	–	89,790	–	(369,591)	(20,692)
At 31 March 2023	**102,694,812**	**16,459,404**	**49,235,892**	**3,983,065**	**2,667,325**	**175,040,498**
Accumulated depreciation						
At 1 April 2022	**4,289,147**	**–**	**11,253,552**	**2,017,285**	**–**	**17,559,984**
Charged in year	754,265	–	266,935	137,000	–	1,158,200
Revaluation	(110,875)	–	73,662	277,929	–	240,716
Disposal and derecognition	–	–	(2,250)	–	–	(2,250)
At 31 March 2023	**4,932,537**	**–**	**11,591,899**	**2,432,214**	**–**	**18,956,650**
Net book value						
At 1 April 2022	**86,569,975**	**14,921,447**	**37,330,005**	**1,503,127**	**2,728,288**	**143,052,842**
At 31 March 2023	**97,762,275**	**16,459,404**	**37,643,993**	**1,550,851**	**2,667,325**	**156,083,848**

i) Valuation principles and methodology:

The company has chosen to value the network at fair value. Fair value is a rational and unbiased estimate of the potential market value of an asset at a particular point in time (in this case the company's year-end accounting reference date). Generally, the uplift on revaluation (the gain) is recorded in a revaluation reserve, subject to adjustments discussed at 6.2.iii.B below.

The SRN is a specialised asset and does not have an easily attainable market valuation or an income stream on which to base the valuation. The company therefore determines the fair value of the SRN using Depreciated Replacement Cost (DRC) in accordance with the guidance provided by the FReM (Government Financial Reporting Manual). This approach is consistent with accounting standard IFRS 13 (fair value measurement) and calculates the value of the SRN to a theoretical buyer based on how much it would cost to construct a network of equivalent service potential. At a high level, the DRC estimate involves the calculation of an 'as new' replacement cost based on a modern equivalent asset offering the same function (which the company takes to include identical routing and capacity) on a greenfield site, before applying depreciation to reflect the current condition of the network.

National Highways undertakes a full valuation of each of the high-level SRN elements (roads, structures, land and technology) at intervals not exceeding five years. This valuation is undertaken with support from professional cost estimators and relevant experts on modelling and statistics. The five-yearly valuation, known as a quinquennial review (QQR), is undertaken in accordance with the general principles of the Appraisal and Valuation Manual (Red Book) of the Royal Institution of Chartered Surveyors (RICS).

Valuations are not based on the historic actual cost of construction for individual elements of the SRN but on standard costing rates for the specific asset types making up the SRN on a modern equivalent asset basis. This is determined based on the best information available on the actual cost of recent schemes. Costing rates are kept up to date in intervening years using indexation, as described in note 6.2.iii.

The QQR provides an opportunity not only to derive rates using the latest source data, but also to reconsider the methods used to value assets.

A QQR revaluation of structures was undertaken in 2022–23 with costing rates updated to reflect the prices being charged on schemes completed in recent years. A change in depreciation policy was also identified following a review of the depreciable rates for different structure types but this will not be implemented until the 2023–24 financial year.

The next QQRs in relation to technology, pavements and lands and special structures are due in March 2024, March 2025 and March 2026 respectively.

National Highways does not include any historical cost valuations for assets including the SRN that have subsequently been revalued. Due to the nature of the SRN with ever changing design standards and construction methods, historic costs quickly becomes obsolete and would not provide a meaningful figure to users of these financial statements. In addition due to its size any exercise to develop historic costs would be excessive and not commensurate to any benefits users of these statements would get.

ii) Standard costing rates:
The SRN valuation is based on a standard cost model. Many accounting assumptions are made when calculating the unit rates for the various elements of the SRN as part of the QQR process:

Unit cost	Measurement principles
Roads	Standard costing for roads is based on 31 road types, each of which has a standard unit rate that is applied across the SRN for the relevant road type. Unit rates are generated from suitable schemes constructed over recent years that have opened for traffic. Where a road type is not represented by recent construction work, the company extrapolates data based on known costing relationships between road types.
Land	Land costing rates are determined for the SRN land parcels based upon values provided by the Valuation Office Agency. Parcels of land are calculated by adding an average buffer (linked to the road type and location) to the width of each section of road. The buffer would cover the land required for elements such as verges, slopes and berms at the side of a road. Once this land has been quantified, the appropriate land costing rate based on its geographic location is then applied to it. Some land occupied by the SRN is not owned by the company, e.g. Crown land; however, as the company is entitled to use this land in perpetuity it is included within the freehold value of the network.
Structures	For standard structures, unit rates are calculated based upon recently completed schemes. Bridges, gantries and retaining walls are valued by applying unit rates to the scale of each asset, e.g. the span and width of bridges. Special structures, such as the Dartford Thurrock River Crossing, cannot be quantified and valued in the same manner as other structures due to the unique combination of their size, construction and character. For these assets, professional judgements are used to inform the valuation. Special structures have a net value of approximately £3.7 billion.

Technology	For technology equipment (which includes Variable Message Signs, CCTV, Automatic Number Plate Recognition cameras, cabling, telephones and signal power supplies), unit costs are developed by the National Highways commercial team using rates from technology frameworks currently in place between the company and its contractors and bulk purchase prices for materials procured directly by the company. The unit costs for technology equipment include the cost of individual components, installation costs, commissioning costs, preparation and supervision costs, and traffic management costs where applicable.

iii) Applying the valuation principles

At a high level, the process for valuing the SRN is as follows:

Quinquennial review

A Capitalise asset at cost

B Adjust gross replacement cost

C Apply depreciation

D Derecognition, impairment and detrunking

A

Capitalisation policy (capitalise asset at cost):

Capital expenditure is the money that we spend on purchasing, renewing or improving our assets. There is no minimal value threshold for capitalisation of SRN expenditure. Costs are capitalised in accordance with the following policies:

Construction	All construction expenditure on schemes is capitalised. Design costs are capitalised when the related scheme is included within the RIS and where there is reasonable certainty the scheme will go ahead. Where a scheme is later withdrawn from the capital programme, total design expenditure already incurred is written off and recognised in the Statement of Comprehensive Net Expenditure. Any remaining land and property is transferred to surplus land and buildings or dwellings.

Internal staff costs	Costs that can be directly attributed to the construction of an asset, including capital renewal schemes, are capitalised. Staff costs are capitalised by taking the ratio of capital spend to total programme spend for each directorate supporting the delivery of the capital works. This ratio is then applied to the total pay costs for each directorate.
Renewal and enhancements	The SRN is intended to be maintained at a specific level of service potential by continual replacement and refurbishment. The SRN is inspected regularly to enable maintenance to be planned on a priority basis. Expenditure on the SRN is capitalised only for projects which extend the network's service potential. This can be done through enhancement schemes, for example road widening schemes, new roads or structures, or renewal of the network, including surface replacement works and major bridge refurbishments which extend the life of the network. Maintenance expenditure, which represents day-to-day servicing such as pothole repairs or drainage clearance, is charged to the Statement of Comprehensive Net Expenditure as incurred.
Technology equipment	Expenditure on technology equipment is capitalised when the equipment is installed and commissioned on the SRN for the first time. This principally comprises variable message signs, CCTV and automatic number plate recognition cameras.

Capital additions

The company has invested £2,251 million (2021–22 £2,049 million) on capital enhancements in the period. This includes investment in major projects, delivery of the designated funds programme and delivering safety and congestion relief schemes.

In addition, we have invested £826.9 million (2021–22 £810.2 million) in capital renewal schemes. Renewal schemes replace the service potential of the SRN and expenditure is therefore deemed capital expenditure.

Renewal schemes are usually small (less than £10 million) and usually completed within 6 to 18 months. The most significant additions during the period included the A11 concrete roads reconstruction (£32.4 million) and the A533 Expressway Bridge (£17.2 million).

B

Adjustments (adjust gross replacement cost):

Each sub-category of the SRN is valued using the standard costing rates identified by the QQR and then adjusted on an annual basis to reflect changes in underlying market conditions. The following adjustments are made to the revaluation reserve and are reflected in other comprehensive expenditure, to the extent that a revaluation surplus is available:

Adjustments to assets under construction: National Highways considers the SRN to be one asset. Assets under construction (AUC) are an integral part of the SRN and due to the physical and functional interdependence of the various elements of the network and there is no distinction made between an asset constructed and an asset under construction. AUC are therefore accounted for on the same basis as any other asset subcategory.

Assets under construction (AUC) are capitalised at cost during construction. In line with RICs principles, the SRN is valued on the basis that the replacement would be on a 'greenfield site'. Road schemes are mostly built on an existing road rather than 'greenfield' and this is more expensive because of the additional cost of traffic management, demolition and other site-specific costs. To provide a consistent valuation of the whole network, the company applies an annual 'greenfield' revaluation adjustment to AUC to bring it back to its depreciated replacement cost.

The company applies revaluation percentages, based upon project type. The percentages derived are based upon the percentage of value transferred to the SRN valuation against total scheme costs for recent projects. This ensures that the valuation of the network is adjusted on an ongoing basis rather than only upon project completion

Renewals-based adjustments: The valuation of the network is calculated based upon condition surveys (see 'condition depreciation' below). Renewals are performed to ensure that the condition of the network is maintained at a steady state. Renewals are not treated for accounting purposes as having an impact upon the valuation of the network because any related improvement in road condition will be reflected within the surveys. On this basis, for both the road and structures asset categories, where there are in-year renewals, the value of the replaced asset elements is adjusted to have nil net book value.

Dimensional variance adjustments: Data quantifying the extent of the SRN is held on a number of internal operational asset management systems which are used to inform the valuation of individual roads and structures. With the use of increasingly accurate measuring technology there can be changes to the measured length, width, and height of the road and structures when they are remeasured. When this happens, it impacts on the valuation of the SRN.

Technical valuation adjustment: New technical requirements mean that concrete barriers are required on all “new” roads. The gross valuation of the network is calculated on modern equivalent basis meaning concrete reservations are included as standard within the road rates. To reflect the fact that the network is composed of around 90% steel reservations, and not the higher costing concrete equivalent, an adjustment has been made to the gross cost for the cost differential between the two barrier types. The value of this adjustment was calculated during the most recent Pavements QQR and will be indexed each year in line with the indices detailed below.

Indexation: Indices are applied in the years between QQRs to ensure the final valuation is at depreciated replacement cost.

In 2022–23 an update has been made to one of the core indices used to uplift the rates between five-yearly revaluations. Previously we had used the Highways England Construction Index (HECI), a bi-annually updated index produced for the company by the Royal Institute of Chartered Surveyors. However, the contract to produce the index ended in-year and has not been renewed.

In its place we will use the Implied Output Price Index – for New Infrastructure Construction (IOPI). IOPI is updated monthly as part of the output in the construction industry datasets released by the ONS. It has been selected based on its relevance to the company particularly as it is used as an indexation mechanism in many of our capital enhancement contracts.

Indexation of the SRN valuation is applied as follows:

Unit cost	Indexation determination
Roads and Structures	The Implied Output Price Index – for New Infrastructure Construction (IOPI) is applied to roads and structures for the purposes of yearly revaluation. IOPI is updated monthly as part of the output in the construction industry datasets released by the ONS, although a quarterly average is used for indexation purposes.
Land	Land indexation is determined by the company in consultation with external consultants and the following sources: • Urban land indices from the Land Registry House price index • Rural land indices from Savills Farmland Market Survey
Technology	IOPI is applied to most technology assets, except for cables and transmission stations which are indexed using the Consumer Price Index

Revaluation

The SRN was revalued upwards by £11.1 billion (2021–22 £9.5 billion upwards). This comprises:

- The IOPI index for the year has moved upwards from 108.5 to 123.8, an increase of 14.1% resulting in a revaluation upwards of around £16.4 billion. In addition the house price index increased significantly across the country, with a total upwards revaluation of land of £1.3 billion
- The network valuation is adjusted for location factors (except for non-structure technology assets and land), which are applied to costs to reflect the regional variations in construction prices. The regional BCIS (Building Cost Information Service) Tender Price Location Study Indices are used as location factors for the valuation. Construction costs vary across the country, with higher costs seen where there is a geographical concentration in the SRN in the south-east and other metropolitan areas. Movement in the location factors in-period has increased the valuation of the network by £0.1 billion.
- During the year to 31 March 2023, the valuation of the asset increased £0.1 billion through dimensional variance. Data quantifying the extent of the SRN is held on a number of internal operational asset management systems which are used to inform the valuation of individual roads and structures. With the use of increasingly accurate measuring technology there can be changes to the measured length, width, and height of the road and structures when they are remeasured. When this happens, it impacts on the valuation of the SRN.
- Included within the rates for pavements are the costs of central reservation barriers. In line with the current technical standard for barriers, these have been valued on the basis that they are constructed from concrete. This does not reflect the true composition of the network where approximately 10% of current central reservations are concrete with the remainder being constructed from metal or wire. As there is a significant difference between concrete and the other forms of central reservation designs both physically, and in build and future maintenance costs, it has been deemed appropriate under the RICS guidance to make a ‘technical valuation’ adjustment. The adjustment has been increased by £0.4 billion to reflect the change in the cost to construct the road as a result of applying the Implied Output Price Index (IOPI) and reflecting any adjustment in the mix.
- During the financial year a full revaluation of structures was carried out. As a result of reviewing recent construction costs and subsequently updating gross structure costing rates there has been a decrease in the valuation of structures of £4.5billion.
- SRN AUC capital additions are recognised at actual cost, but the value of projects is revised annually with the aim of approximating a depreciated replacement cost. The company uses a standard revaluation percentage for construction projects lasting more than one year based upon projects constructed over the previous 10 years.

For the year to 31 March 2023 there was £1.9 billion of downwards valuation adjustments (2021–22 £1.4 billion).

The table below covers the net movement on revaluation:

Net gain/(loss) on remeasurement of property, plant and equipment recognised in other comprehensive expenditure

	SRN £000	SRN AUC £000	NNFA AUC £000	NNFA – Other £000	Total £000
Revaluation- QQR	(4,449,665)	–	–	–	(4,449,665)
Revaluation – indexation	17,785,312	–	–	44,752	17,830,064
Revaluation – value reduction	–	(1,942,062)	553	–	(1,941,509)
Revaluation – dimensional variance	114,577	–	–	–	114,577
Revaluation – structures condition review	–	–	–	–	–
Technical valuation adjustment	(367,704)	–	–	–	(367,704)
	13,082,520	**(1,942,062)**	**553**	**44,752**	**11,185,763**

C

Depreciation (apply depreciation)

Depreciation is a measure of the value of an asset that has been consumed during the accounting period. It represents a loss in value caused by the use of the asset over the year and is charged to the Statement of Comprehensive Net Expenditure.

All parts of the SRN are depreciated, apart from land and the substructure of the road, which are deemed to have an unlimited useful life.

Road depreciation:

The renewable element of the road is subject to depreciation. This includes:

- Surface layer
- Drainage
- Road marking and studs
- Rigid concrete roads

These elements make up 17.5% of the gross replacement cost for the roads component of our network, the remainder being the cost of the land and substructure. For the purpose of depreciation, the road surface is recognised as a single asset and depreciation on these elements is calculated in two parts:

- **Renewals depreciation:** As described in 6.2.iii.B, the valuation of the SRN is calculated based upon condition surveys and renewals do not impact upon the valuation of the network. On this basis, we depreciate 100% of renewals expenditure in the year that it is incurred and account for this charge in net expenditure.
- **Condition depreciation:** The value of the SRN is based on the road pavement's condition and is assessed using the Traffic Speed Road Assessment Condition Surveys (TRACS) performed by WDM Limited and assured by TRL Limited. These surveys measure a range of metrics that gauge road condition, and pavement depreciation is based on rutting, texture, fretting and longitudinal profile metrics. Analysis of the actual condition of the road is compared to the carrying value of the road (after having applied renewals depreciation) and any movement is taken to net expenditure as a charge or credit to depreciation depending on whether the condition has deteriorated or improved.

Structures depreciation:

To calculate the depreciation charge for structures we consider the life of the asset together with cost factors and condition.

Depreciation for structures is determined in two parts as follows:

- **Renewals depreciation:** As with roads, structures are valued based upon condition surveys. As any improvement in condition driven by renewals will be reflected in the results of these surveys, we depreciate 100% of renewals expenditure in the year that it is incurred.
- **Condition depreciation:** Structures are complex assets whose service life can be extended by the renewal of individual elements (reflected in an improvement in condition), and the depreciation methodology we use considers service life changes.

We depreciate structures by developing a depreciation factor based on the weighted average proportion of service life consumed for each structure. This is calculated based on the condition of each element of the structure using the Element Condition Score (ECS) from structure inspections. Where condition improves, the score increases and where the condition deteriorates, the score decreases. Full inspections take place every six years.

The ECS for each element is applied to a deterioration curve and averaged using a calculated replacement cost for each element. This results in a weighted average proportion of service life consumed which is then applied as a depreciation factor to the depreciable part of an asset's gross replacement cost (GRC).

For structural assets managed under PFI contracts, information on the current condition of each asset isn't always readily available within National Highways' asset management databases. Additionally, inspection information is not collected and applied in the same way for tunnels as it is for other structures and therefore it is not possible to calculate a depreciation factor for these assets. Where no depreciation factor is calculable, a weighted average condition score is applied.

Only the renewable elements of a structure are subject to depreciation (as with roads), and these elements have been assessed to make up 69.89% of a structure's GRC. The renewable elements include the substructure and superstructures, rails, fences and surface preparation such as waterproofing. Non-depreciable elements are primarily related to ground and earthworks, and expenditure incurred on preliminary work and mobilisation.

This renewable % rate was reviewed as part of the structures QQR in-year and revised rates for individual structure classes will be confirmed and implemented in 2023–24.

Technology depreciation:

The depreciation charge for technology assets is based on a 'straight line' depreciation methodology with the value reduced over the assets' assigned life. The lifespan of technology varies between 15 and 50 years according to the type of equipment. The lifespan of the majority of equipment is 15 years. Technology assets with a lifespan of 50 years are typically structures to support the technology, e.g. masts.

C

Depreciation charge

The depreciation charge over the period to 31 March 2023 was £1.2 billion (2021–22 £1.0 billion). This consists of:

i) Pavement depreciation, being the decrease in the economic value of the road surface, was £754.3 million (2021–22: £562.2 million). This is made up of:

- Renewals spend of £650.9 million (2021–22: £617.7 million) is used as the basis of an initial depreciation charge, based on the assumption that the network is maintained in a roughly steady state; and
- Analysis of road condition surveys provides evidence on the actual condition of the network, which allows for more precise depreciation of the road surface.

The depreciation charge for the year is £103.4 million (2021–22: charge of (£55.5) million).

ii) Structures depreciation was £266.9 million (2021–22: £287.7 million). This is made up of:

- Renewals spend of £176.0 million (2021–22: £192.5 million) is used as the basis of an initial depreciation charge, based on the assumption that the network is maintained in a roughly steady state; and
- Analysis of structural inspections provides evidence on the actual condition of the assets which allows for more precise depreciation of our structures.

The depreciation charge for the year is £90.9 million (2021–22: £95.3 million).

iii) Technology depreciation – £137.0 million (2021–22: £137.1 million) depreciation charge for the economic decrease in value of technology on the SRN.

D

Derecognition, impairment and detrunking (disposals)

Derecognition: Elements of the SRN removed from service during the year are derecognised (i.e. removed from the financial statements) in line with accounting standard IAS 16 (property, plant and equipment) and the resulting loss on writing off the asset is charged to the Statement of Comprehensive Net Expenditure.

Impairment: Impairment refers to the permanent reduction in value of a company's assets below its carrying value as shown in the financial statements. The road surface and other SRN components are subject to an annual impairment review. Where they occur, impairments are recognised in line with IAS 36 (impairment of assets), by reducing the carrying value of the asset in the Statement of Financial Position and recognising a charge on the Statement of Comprehensive Net Expenditure to the extent that the impairment loss exceeds the available revaluation reserve.

Detrunking/trunking: During the accounting period the value of the SRN can be decreased by 'detrunking'. This is where a road/route is transferred from the company to a local authority. The value of the SRN can also be increased by 'trunking' when the company adopts a local authority road. Detrunking tends to occur when roads are superseded as part of the SRN following the construction of a new road. Such events are accounted for as a disposal for nil consideration. Trunking and detrunking are shown within the PPE notes as additions and disposals at the point that the asset is added or removed from the SRN. There were no detrunkings in this or the prior accounting period.

Derecognition and disposals in the period

Derecognition for the period from the SRN asset was £8.1 million (2021–22 £70.3 million).

This is made up of the derecognition of £8.1 million of structural assets. The SoCNE presents the overall loss from derecognition and disposals, which includes a profit of £2.8 million made on the disposal of non-SRN assets (2021–22 £11.2 million loss).

6.3. Non-network assets

All assets which do not form part of the SRN are categorised as non-network assets. This includes land and buildings, plant and machinery and IT equipment, which are accounted for as follows:

A Capitalise asset at cost

B Perform annual revaluation

C Apply depreciation

A

Capitalisation policy (capitalise asset at cost)

All non-network assets above the minimum thresholds listed below are capitalised at cost.

Element	Threshold
Plant and Machinery	£2,000
IT Equipment	£2,000
Land and Buildings	No minimum

B

Valuation (perform annual revaluation)

Land and buildings: Freehold land and buildings are valued on the basis of open market value for existing use. External professional surveyors, in accordance with the (RICS) Red Book, undertake a full valuation of these assets at intervals not exceeding five years. Between valuations, values are adjusted with regional land and building indices calculated by our consultant engineers using rural land indices from the Savills Farmland Market Survey and average house price data from the Land Registry.

Surplus properties including dwellings will be revalued in December 2023, and a full revaluation of motorway service areas, motorway maintenance compounds, regional control centres and the National Traffic Operations Centre is next due for March 2026.

Plant and machinery: Structural steelwork is stated at fair value using the current market value of steel. Other plant and machinery is stated at fair value using yearly plant and equipment indices supplied by the Office for National Statistics (ONS).

Information technology: Information Technology consists of IT hardware and database development. Assets are stated at fair value using yearly plant and equipment indices supplied by the ONS.

Assets under construction: Non-network assets which are under construction at the period end are held at historical cost and are not subject to adjustment until after they have been completed and transferred to the appropriate asset category.

C

Depreciation (apply depreciation)

Freehold land is not depreciated. Other non-network assets are depreciated at rates calculated to reduce the assets value over their expected useful lives on a straight-line basis as follows:

Asset Category	Asset Sub-category	Asset Lifespan
Land & Buildings	Freehold buildings	Up to 60 years
	Leasehold buildings	Length of lease
	Dwellings (non-surplus)	Not depreciated
Plant and Machinery	Maintenance equipment	3–25 years
	Office equipment	3–10 years
	Vehicles	5–10 years
	Structural steelwork	10 years
	Test equipment	5–10 years
	Moveable Barriers	30 years
Information technology	Technology equipment	3–5 years
	IT equipment	5 years
	Database development expenditure	5–10 years

Non-network asset balances

Land: Land consists of surplus land and land reserved for current and future road schemes. As at 31 March 2023 this includes motorway service areas land of £126.1 million (2021–22 £117.6 million), Dartford commercial land of £50.9 million (2021–22 £48.6 million), and motorway maintenance compounds land of £46.1 million (2021–22 £43.3 million).

Buildings: As at 31 March 2023 the net value of buildings includes motorway maintenance compounds of £41.5 million (2021–22 £25.9 million), regional control centres of £9.4 million (2021–22 £8.5 million), and commercial buildings at Dartford of £6.8 million (2021–22 £5.0 million).

Dwellings: As at 31 March 2023 the value of dwellings is £158.8 million (2021–22 £124.5 million). These are dwellings acquired under compulsory purchase orders as part of a scheme to enable construction.

This includes dwellings relating to the following schemes:

	31 March 2023 £m	31 March 2022 £m
Lower Thames Crossing	51.6	40.4
A27 Arundel Bypass	17.5	10.4
M42 J3A Widening	13.3	12.5
A12 Chelmsford – A120 Widening	12.1	3.1
A6M Stockport North/South Bypass	10.4	9.9

Assets under construction

The assets under construction (AUC) balance relates solely to non-network fixed assets. As the SRN is considered to be one asset, due to the physical and functional interdependence of its component parts, AUC is recorded within the Strategic Road Network column within table 6.1.

i) AUC transfers

The company has transferred £76.2 million (2021–22 £74.0 million) of completed projects from non-network AUC to non-network assets. In addition, a further £20.7 million of land and dwellings acquired as part of SRN schemes has been transferred as it is either surplus or for future use.

ii) Revaluation

Non-network AUC capital additions are recognised at actual cost. A review of prior year transactions identified that some of these capital additions had been valued downwards in line with the policy for the SRN as highlighted in note 6.2. Assets were revalued upwards by £0.1 million in-year (2021–22 £3.0 million) to correct this.

iii) Impairment

Within non-network AUC there are some additions that do not provide a true asset to the company. This generally occurs in projects that provide wider support to the capital programme or maintenance work that is renewing an existing asset.

Such items have been reviewed in-year, which has resulted in an impairment of £119.4 million (2021–22 £103.9 million).

6.4 Intangible assets

Intangible assets are assets which are without physical substance, including computer software and licences. In line with IAS 38 (intangible assets), the company only recognises an intangible asset if it is probable that future economic benefits will be produced for the company and the costs can be measured reliably.

Intangible assets are measured initially at cost and are amortised on a straight-line basis over their useful lives, which are reviewed at the end of each reporting period. Licences over £2,000 are treated as intangible assets. Costs below this are expensed as they are incurred.

	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Cost or valuation		
Opening balance	**97,682**	**71,909**
Disposals and derecognition	(271)	(7,740)
Reclassifications	7,603	33,513
Closing balance	**105,014**	**97,682**
Amortisation		
Opening balance	**63,963**	**61,829**
Charged in-year	8,148	6,520
Disposals and derecognition	(232)	(4,386)
Closing balance	71,879	63,963
Net book value	**33,135**	**33,719**

The most significant in-house databases by cost value are: NRTS 2 (National Roads Telecommunication Services), costing £20.2 million (2021–22 £20.2 million) and T-Toc (roadside technology asset system) with a cost of £13.3 million (2021–22 £13.3 million). The company has a number of bespoke databases that are fully amortised but continue to provide economic benefits. The databases will be updated or replaced at a future date.

6.5 Assets classified as held for sale

Non-current assets are classified as assets held for sale in accordance with IFRS 5 (Non-current assets held for sale and discontinued operations) where they are available for sale in their present condition and are expected to be sold within one year. This comprises surplus land, buildings, dwellings, plant and machinery and other assets that are no longer in use. These assets are valued at the lower of their carrying amount and fair value (taken to be market value) less selling costs where material.

	Land and buildings £000	Dwellings £000	Total £000
At 1 April 2021	**2,764**	**6,891**	**9,655**
Disposals	(663)	(2,942)	(3,605)
Impairment – charged to SoCNE	(1,777)	(1,592)	(3,369)
Reclassifications	3,063	5,714	8,777
At 31 March 2022	**3,387**	**8,071**	**11,458**
At 1 April 2022	**3,387**	**8,071**	**11,458**
Disposals	(376)	(1,261)	(1,637)
Impairment – charged to SoCNE	(208)	(429)	(637)
Reclassifications from property, plant and equipment	265	1,267	1,532
At 31 March 2023	**3,068**	**7,648**	**10,716**

Disposals in the year ended 31 March 2023 included the following sales:

- Stanbridge Place, Handcross, West Sussex (£0.7 million)
- Gore Tree Cottage, Huntingdon, Cambridgeshire (£0.5 million)
- Thoroughway House & Cottage, Bedale, North Yorkshire (£0.3 million)

Reclassifications of land and dwellings relates to the movement of items from property, plant and equipment that are expected to sell within the next year.

6.6 Inventories

	31 March 2023 £000	31 March 2022 £000
Communication/electrical equipment for the SRN	38,891	20,951
Salt	9,598	9,844
Other	517	645
	49,006	**31,440**

The inventory balance is composed of technology, salt, uniforms and steel and is valued at the lower of cost and the value that can be realised upon sale (net realisable value). The cost of inventories includes all costs incurred in bringing the items to their present location and the cost for valuation purposes is calculated on the basis of the weighted average cost of each category of inventory.

The communication/electrical equipment inventory includes variable messaging signs which have been extensively used on our schemes

The company's salt stock includes reserves held for the English Local Highways Authorities. This reserve is only for use as a last resort in the event of normal domestic salt supply channels being unable to meet the demands of Local Highways Authorities. The salt is stored to protect it from leaching from rainfall. However, over time salt deteriorates and therefore the company's policy is to re-measure the holding each year, to reflect any loss from deterioration.

Inventories increased by £18 million due to greater investment in operational technology and price increases due to inflation.

7. Financial assets and liabilities

A financial instrument is a contract between parties that gives rise to a financial asset of one entity and a financial liability of another entity. This note provides information about the company's financial instruments, including:

- an overview of all financial instrument assets and liabilities
- accounting policies
- information about determining the fair value of instruments

The company's exposure to risks associated with the financial instruments is discussed in note 9. The maximum exposure to credit risk at the end of the reporting period is the carrying amount of each class of financial assets mentioned below.

7.1 Cash

	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Balance as at start of the period	**39,845**	**(13,417)**
Net change in cash	(67,870)	53,262
Balance as at end of the year	**(28,025)**	**39,845**
The following balances were held at:		
Commercial banks	9,108	8,268
Government Banking Service	(37,133)	31,577
	(28,025)	**39,845**

Cash figure comprises bank balances held with the Government Banking Service and commercial bank accounts.

Cash reserves were run down at the year-end to facilitate additional payment requests made at short notice from the supply chain, this was discussed and agreed with DfT who provided the additional funding the following working day; the company does not have an overdraft facility and the credit balance relates to the timing of payment recognition.

The company does not hold any cash equivalent balances.

7.2 Trade and other receivables

	31 March 2023 £000	31 March 2022 £000
Amounts falling due within one year		
Trade receivables		
Receivable from contracts with other customers	12,948	11,218
Receivable from contracts with local authorities	1,310	4,634
Receivable from agreements with government	203	1,104
Deposits and advances	124,998	95,194
VAT	102,742	106,601
Prepayments and accrued income		
Receivable from contracts with other customers	8,013	5,034
Receivable from contracts with local authorities	211	114
Receivable from agreements with government	8,406	4,626
Other receivables	(11)	6,221
	258,820	**234,746**
Amounts falling due after more than one year		
Prepayments and accrued income	7,661	10,476
	7,661	**10,476**
Total receivables	**266,481**	**245,222**

i) **Trade receivables** are amounts due from customers for goods sold or services performed in the ordinary course of business which can include third party claims, third-party projects (S278), former tenants and employee overpayments.

ii) **Deposits and advances** primarily relate to advances to third parties for project-related prepayments such as payments to statutory undertakers. The largest of which relate to: A428 Black Cat to Caxton Gibbet, A12 Chelmsford to A120 Widening and A1 Birtley to Coal house Widening which have increased by £13.5 million, £13 million and £8.7 million respectively.

iii) **Prepayment and accrued income** balance includes third-party contributions to schemes, minor occupier income, and property prepayments for offices, depots and buildings used by the company.

Due to the short-term nature of the current receivables, their carrying amount is considered to be the same as their fair value.

The policy surrounding the impairment of financial assets is covered in note 19.9 impairment on page 361.

7.3 Trade and other payables

	Note	31 March 2023 £000	31 March 2022 £000
Amounts falling due within one year:			
Taxation and social security		11,911	11,159
Trade payables		81,278	44,013
Accruals		701,954	762,222
Deferred income			
Receivable from contracts with other customers		27,739	14,175
Receivable from contracts with local authorities		25,843	50,528
Receivable from agreements with government		2,739	8,124
PFI contracts	7.5.2	97,928	91,998
Future lease commitments	7.5.1	17,184	7,721
Other payables		54,798	50,577
		1,021,374	**1,040,517**
Amounts falling after more than one year:			
PFI contracts	7.5.2	1,075,685	1,173,613
Future lease commitments	7.5.1	45,290	46,118
Deferred income		36,017	36,626
Retentions		202	204
		1,157,194	1,256,561
Total payables		**2,178,568**	**2,297,078**

i) ***Taxation and social security*** covers employer liabilities such as income tax and national insurance and corporation tax commitments

ii) ***Trade payables*** are amounts owed to suppliers for goods or services provided to the company.

iii) ***Accruals*** recognise expenses that have been consumed that have not been paid for. Accruals are needed to ensure that all expenses (and revenues) are recognised within the correct reporting period so that the amount of revenue, expense, and profit or loss in a period reflects the actual level of economic activity within the company.

iv) ***Deferred income*** occurs when an entity has received income in advance of it being earned; it is deferred until it has been earned. This can include scheme contributions and rent in advance from minority occupiers.

v) ***Capital element under on balance sheet PFI contracts*** reflects the outstanding capital liabilities in relation to longstanding service concession arrangements with private sector entities.

vi) ***Future Lease Commitments*** relates predominantly to buildings used by the company.

7.4 Provisions

In line with accounting standard IAS 37 (provisions, contingent liabilities and contingent assets), the company provides for legal or constructive obligations that are of uncertain timing or amount at the Statement of Financial Position date, but where it is more likely than not that a liability exists. The measurement of the provision is based upon the best estimate of the expenditure required to settle the obligation.

	Land and property acquisition £000	Engineering and construction £000	Leased assets £000	Other £000	Total £000
At 1 April 2021	**381,037**	**71,882**	**868**	**12,276**	**466,063**
Provided in the year	77,535	–	696	15,296	93,527
Provisions not required written back	(89,718)	(71,882)	–	–	(161,600)
Provisions utilised in the year	(72,710)	–	–	(5,753)	(78,463)
At 31 March 2022	**296,144**	**–**	**1,564**	**21,819**	**319,527**
At 1 April 2022	**296,144**	**–**	**1,564**	**21,819**	**319,527**
Provided in the year	246,272	–	46	2,239	248,557
Provisions not required written back	(78,937)	–	–	(10,797)	(89,734)
Provisions utilised in the year	(57,675)	–	–	(1,397)	(59,072)

At 31 March 2023	**405,804**	**–**	**1,610**	**11,864**	**419,278**

Analysis of expected timing of discounted flows:

	Land and property acquisition £000	Engineering and construction £000	Leased assets £000	Other £000	Total £000
Not later than one year	162,322	–	81	11,469	173,872
Later than one year and not later than five years	243,482	–	473	85	244,040
Later than five years	–	–	1,056	310	1,366
	405,804	**–**	**1,610**	**11,864**	**419,278**

Land and property acquisition: These provisions relate principally to the estimated cost of planning blight, discretionary and compulsory acquisition of property and compensation for property owners arising from physical construction of a road scheme.

Planning blight occurs when the value of a property is substantially reduced because of a proposal to carry out works. We are liable for, and have the ability to, purchase affected property and recognise the liability arising from the requirement to purchase blighted properties at the point of the preferred route announcement.

Parliament has given us the ability to purchase land so that we can carry out infrastructure developments that are in the public interest. Our policy is to recognise the liability for these compulsory purchases at the point a Development Consent Order (DCO) or Compulsory Purchase Order (CPO) is made.

Compensation can be claimed by people who own and also occupy property that has reduced in value by physical factors caused by the use of a new or altered road. The liability can arise from noise, smell, lighting, etc. and we provide for this compensation (known as Part 1 claims) at the commencement of construction.

At 31 March 2023 we held £101 million of blight provisions, £273 million acquisition provisions, and £32 million relating to Part 1 claims.

It may take several years from the announcement of a scheme to completion of the road and final settlement of all liabilities, and our estimates are subject to uncertainty through scoping changes and macroeconomic factors such as inflation and the supply of funding available.

Engineering and construction: Prior year provisions related to an outstanding judgement surrounding VAT recovery rates on the construction phase of Hybrid[1] schemes. These have now been settled.

Leased assets provisions relate to the potential cost of reinstating leased buildings back to their original condition at the end of the lease.

Other: Other provisions include those to third parties who have suffered damage or injury as a result of the road network being damaged and are entitled to submit a claim to National Highways for compensation. A provision is made which estimates the value of claims received as at 31 March 2023 that will require settlement by National Highways.

1 Hybrid schemes are those schemes which take place partially within and partially outside of the network boundary. They are significant as the company can only recover VAT on construction work which takes place on the existing SRN.

Provisions provided in-year and not written back reconcile as follows:

	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Provisions provided in year	248,557	93,527
Less provisions written back	(89,734)	(161,600)
Net provisions expenditure	**158,823**	**(68,073)**
Split as follows:		
Resource expenditure	(8,323)	15,658
Capital expenditure	167,100	(84,427)
Leased asset expenditure	46	696
	158,823	**(68,073)**
Provision for slow-moving stock	(4,494)	528
Total provision charge to the SoCNE	(8,323)	15,658

	(12,817)	**16,186**

7.5 Financial instruments

7.5.1 Commitments under leases

	31 March 2023 £000	31 March 2022 £000
Lease liabilities		
Balance as at start of year	53,839	58,914
Additions in year	28,778	4,785
Liability (deletions)	(1,501)	–
Repayment of lease liability	(19,666)	(10,819)
Interest on leases	1,024	959
Balance as at end of year	**62,474**	**53,839**
Amounts falling due		
No later than one year	17,184	7,721
Later than one year and not later than five years	34,908	31,486
Later than five years	10,382	14,632
	62,474	**53,839**

The company leases many assets including buildings and recognise a right-of-use asset and a lease liability at the commencement of a lease.

The lease liability is measured as the payments, net of value added tax, for the remaining lease term, discounted either by the rate implied in the lease, or, where this cannot be determined, the incremental cost of borrowing is the rate advised by HM Treasury. The company does not typically undertake external borrowing and is instead funded annually by the Department for Transport, which draws down its funding from the Exchequer. The company's incremental borrowing rate is therefore advised by and aligned to the Treasury rate.

The right-of-use asset is measured at the value of the liability, adjusted for: any payments made before the commencement date; lease incentives received; incremental costs of obtaining the lease; and any disposal costs at the end of the lease. However, where the lease requires nominal consideration (a type of arrangement often described as a 'peppercorn' lease), the asset is measured at its existing use value.

The asset is subsequently measured using the fair value model. The company considers that the cost model is a reasonable proxy for the fair value model for leases of items other than land and property, and for leases of land and property with regular rent reviews. For other leases, the asset is carried at a revalued amount.

The liability is adjusted for the accrual of interest, repayments, reassessments and modifications.

In the year ended March 2020, the company adopted the practical expedient to exclude initial direct costs from the measurement of the right-of-use asset at the date of initial application for transitioned leases.

Leases which are considered to be low value, or have an expected length of less than a year, are not recognised under IFRS 16 and the related costs are shown in the SoCNE.

7.5.2 Commitments under private finance initiatives

The company has longstanding service concession arrangements with private sector entities to develop, build, finance, operate and maintain infrastructure and deliver services directly or indirectly to the public. National Highways controls or regulates the services provided and controls any significant residual interest in the infrastructure.

The company recognises the infrastructure associated with service concessions as an asset and recognises the related liability. The asset is accounted for in the same way as other assets of that type. Interest on the liability and expenditure on services provided under the service concession are recognised in the net operating expenditure as they accrue under the contract. The annual payments are apportioned between three elements: an element to pay for services; an element to pay interest on the liability; and an element to repay the initial liability.

The asset and liability are both initially recorded at the fair value of the property and the asset is subsequently revalued and depreciated in accordance with accounting policies for property, plant and equipment: see note 6.1.

The substance of the PFI contract under IFRIC 12 (Service Concession Arrangements) is that the company has a finance lease, with the asset being recognised as a non-current asset of the company.

The total payments on balance sheet PFI contracts for which the company is committed are given in the tables below, analysed according to the year in which the commitment expires.

PFI	Contract start date	Duration	Initial capital value	Closing balance obligation £m	Service charge commitment £m
M40 Denham to Warwick	01/01/1999	29	71.2	18.2	189.5
A19 Dishforth to Tyne Tunnel DBFO	31/03/1999	28	47.8	12.2	210.8
A30/A35 Exeter to Bere Regis	31/03/2000	26	135.1	27.3	12.8
A1 (M) Alconbury to Peterborough	31/03/1999	27	192.3	38.3	35.0
A419/A417 Swindon to Gloucester	31/03/1998	28	104.6	20.6	22.4
A50/A564 Stoke to Derby Link	31/03/1998	29	37.3	9.4	35.7
M1-A1 Yorkshire link	31/03/1998	28	395.4	77.8	1.0
A69 Carlisle to Newcastle	31/03/1998	28	19.6	3.9	37.2
A1(M) Darrington to Dishforth	01/03/2006	31	236.4	151.4	464.9
A249 Iwade to Queenborough	01/03/2007	28	92.8	56.0	110.9
M25 London Orbital Motorway contract	01/04/2010	30	931.4	758.6	6,589.0
Total			**2,263.9**	**1,173.7**	**7,709.2**

Recognised fair value measurements

For PFI obligations not carried at fair value, there is no active market for them, and it is not possible to make a reliable estimate of fair value. The company has no intention of disposing of these obligations. Accordingly, it has not disclosed a fair value for these obligations. For other financial assets and liabilities, the carrying value is a reasonable approximation of fair value.

Imputed finance lease charges under on balance sheet PFI contracts comprise:

	31 March 2023 £000	31 March 2022 £000
Not later than one year	181,982	181,981
Later than one year and not later than five years	590,856	665,125
Later than five years	1,130,501	1,238,213
	1,903,339	**2,085,319**
Less interest element	(729,726)	**(819,708)**
	1,173,613	**1,265,611**

Capital element under on balance sheet PFI contracts comprise:

	31 March 2023 £000	31 March 2022 £000
Not later than one year	97,928	91,998
Later than one year and not later than five years	318,322	368,497
Later than five years	757,363	805,116
	1,173,613	**1,265,611**

The total amount charged in respect of the repayment of the capital element of the PFI transactions for the period to 31 March 2023 was £92 million (2021–22 £86.4 million).

Interest element under on balance sheet PFI contracts comprise:

	31 March 2023 £000	31 March 2022 £000
Not later than one year	84,054	89,983
Later than one year and not later than five years	272,534	296,628
Later than five years	373,138	433,097
	729,726	**819,708**

The total amount charged in the SoCNE in respect of interest on balance sheet PFI transactions for the period to 31 March 2023 was £90 million (2021–22 £95.5 million).

7.5.3 Details of the minimum PFI service charge to SoCNE:

	31 March 2023 £000	31 March 2022 £000
Not later than one year	457,111	372,890
Later than one year and not later than five years	1,912,840	1,645,263
Later than five years	5,339,220	4,680,351
	7,709,171	**6,698,504**

PFI service charges are based on multiple contractual elements. These include, but are not limited to: traffic numbers; inflation; and lane availability. Assumptions are made on how the current position of these contractual elements will affect the minimum service charge.

The total amount charged in the SoCNE in respect of the service element of on balance sheet PFI transactions for the period to 31 March 2023 was £351.4 million (2021–22 £315.0 million).

8. Equity and reserves

	31 March 2023 £	31 March 2022 £
Authorised		
10 ordinary shares at £1 each	10	10
Allotted, called up and fully paid		
10 ordinary shares at £1 each	10	10

Reserves

As the company generates minimal income, the DfT provides funds annually in the form of a cash contribution, on behalf of the Secretary of State for Transport as the sole shareholder of the company. The funds received are used to finance expenditure that supports the objectives of the company in accordance with the company's licensing terms. These funds are allocated to the retained earnings reserve, along with the company's net expenditure. At the start of operations on 1 April 2015, the company received a transfer from the Secretary of State for Transport comprising the assets of the Highways Agency, including the SRN (with the exception of the Severn Bridge and M6 toll road).

In accordance with generally accepted practice in respect of common control transactions, the net assets from this transfer were credited at book value to the revaluation reserve to the extent of the revaluation surplus available in the Highways Agency at the point of transfer; and for the balance, to a capital contributions reserve. Intra-reserve transfers relating to revaluation are posted against the capital contributions reserve since they relate in the main to the transferred-in network asset.

All reserves are non-distributable other than to the Secretary of State for Transport within the legislative framework and as defined by the Companies Act 2006.

Risk

Accounting Judgements and Estimates

9. Critical accounting judgements and key sources of uncertainty

A series of estimates and judgements are used to produce these financial statements. These estimates are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

9.1 Property, plant and equipment

The SRN is valued using an approach to determine depreciated replacement cost, as described in note 6.2.i. The valuation is built up using an understanding of the extent of the network and its component parts on a modern equivalent basis; the application of a number of costing rates for those component parts, by type; and the condition of the network. In this context, it is sensitive to a number of significant areas of estimation, including the following:

Costing rates Costing rates used to inform the valuation of roads and structures are based on schemes constructed in recent years. At each full revaluation (quinquennial review), costing rates are derived for specific asset types, for example bridges are classified by their length and width. For some specific asset types there may be a limited number of schemes which provide a direct comparator. In these cases, we derive a costing rate through a line of best fit approach applied to a broader asset type (e.g. bridges) using available data and known costing relationships between asset types. This provides a complete set of data points based on the best available information. This approach requires estimation but we are satisfied that uncertainty is minimised by making use of the full available information. The impact of this approach is minimised as direct comparators are easily obtainable for common network features. ***Changes to costing rates do have an impact on the final valuation within the accounts. A 10% movement on costing rates would impact the valuation by £15.3 billion net.***	**Indices** We apply a number of construction-related indices to the costing rates for various elements of the SRN, both as part of the full revaluation exercises (quinquennial reviews) and to revalue the overall SRN components in interim valuation years. We choose indices which we judge most relevant to the replacement costs of the SRN's component parts. Information on specific indices is found in note 6.2.ii.b. The Implied Output Price Index - For New Infrastructure Construction (IOPI) has been adopted for roads, structures and most technology assets. This index is specific to the costs incurred on projects at National Highways. Land is indexed in alignment with urban and rural land indices, in conjunction with rural land indices from the Savills Farmland Market Survey. ***The network valuation is sensitive to indices. An increase in the Implied Output Price Index (IOPI) of 10 percentage points would impact the valuation of the network by £11.0 billion net.***
Condition factors **Road surface condition** determines the in-year depreciation charge for the roads component of the SRN. It is analysed using surveys carried out on all lanes of the SRN at 10 metre intervals. These surveys measure a range of metrics that gauge road condition, and pavement depreciation is based on rutting, texture, fretting and longitudinal profile metrics.	**Useful economic life** We make assumptions about the period of time during which various elements of the SRN will provide service potential. Estimates are made of the useful economic life of structures, roads and technology equipment using historic trends and expert knowledge.

Structures condition is reflected in the carrying value of the SRN structures element, which is in turn influenced by a depreciation charge based on an asset valuation model. This builds in both the impact of deterioration over time and periodic renewal, as set out in note 6.2.iii.C. We keep information on the condition of our structures under regular review to assess whether an adjustment is required for depreciation to reflect an engineering assessment of the current condition point.	

9.2 Cost of work done (COWD):

The additions to Property, plant and equipment are valued using an estimate of the cost of work done in the year to 31 March. To the extent that the COWD is greater than the invoiced amount, a PPE addition and a corresponding accrual (Note 7.3) are recognised on the basis of expected amounts required to settle contractual obligations. COWD assessments are based on information readily available to project managers on the status of works, but some estimation uncertainty is involved in the year-end measurement, in respect of the evaluation of how contractual dispute positions are likely to resolve, and in measuring the value of works performed at the year-end date.

9.3 Legal claims

Legal claims are recorded as contingent liabilities or provisions when the company faces legal claims and challenges, which may result in the possible outflow of economic benefits. The classification of these, as well as their valuation, and presentation as current or non-current, is based on legal advice.

9.4 Land and property

Land and property are acquired as necessary as part of the company’s work to improve the network. During the early stages of a project, until the preferred route is announced, potential blight claims are treated as remote and are not disclosed. After the preferred route announcement is made until the point of purchase they are treated as provisions. Potential acquisitions relating to land and property are not disclosed (due to the level of uncertainty over whether the land will be acquired) until the issue of a compulsory purchase order (CPO) or a development consent order (DCO) at which point a provision is recognised. The valuation of these provisions is provided by the Valuation Office Agency using their professional expertise to make the relevant estimation. As with all land valuation this estimation considers factors such as geographical location and land classification (urban/rural).

9.5 Irrecoverable VAT

VAT is only recoverable in relation to works on the existing SRN in accordance with Contracted Out Services Headings: COS Heading 6 – Alteration, repair and maintenance of road schemes. Assessments to determine the correct recovery rate for VAT on schemes are performed by the commercial and procurement team and are based upon the initial scheme estimations with greenfield sites and structures removed to assess recoverable VAT, as required by COS 6. As these calculations are internally generated, VAT rules are open to interpretation and HMRC can assess up to four years of historic VAT charges; VAT remains a significant area of judgement.

10. Financial risk management

IFRS 7 (Disclosure Requirements) requires minimum disclosures about the nature and extent of credit risk, liquidity risk and market risk that the company faces in undertaking its activities. Due to the largely non-trading nature of its activities and the way in which government entities are financed, the company is not exposed to the degree of financial risk faced by many business entities. Moreover, financial instruments play a much more limited role in creating or changing risk than would be typical of the listed companies to which IFRS 7 mainly applies. The company has no powers to borrow or invest surplus funds.

Financial assets and liabilities are generated by day-to-day operational activities and are not held to change the risks facing the company in undertaking its activities. Nevertheless, the company's Board of Directors has overall responsibility for the establishment and oversight of the company's risk management framework. The core operations of the company are resourced largely from funds voted by Parliament and so has limited dependency on revenues from customers. This substantially reduces many financial risks.

10.1 Credit risk

Credit risk is the risk of suffering financial loss, should any of the company's customers or counterparties fail to fulfil their contractual obligations to the company. Some of the company's customers and counterparties are other public-sector organisations. No credit risk arises from these organisations since the receivables are backed by the government. For those customers and counterparties that are not public sector organisations, the company has policies and procedures in place to ensure credit risk is kept to a minimum.

The carrying amount of financial assets represents the maximum credit risk exposure. Receivables are impaired on the basis of either ageing by receivable type or where a specific receivable is deemed to be recoverable or irrecoverable, based on the information available.

The following table provides an overview of the ageing profile of the financial assets comprising trade and other receivables.

	31 March 2023 £000	31 March 2022 £000
Ageing of financial assets	263,728	243,234
Neither past due nor impaired	567	928
Past due 1–30 days	365	136
Past due 31–60 days	488	**95**
Past due 61–90 days	1,333	**830**
Past due >90 days	**266,481**	**245,223**

10.2 Liquidity risk

Liquidity risk is the risk that the company is unable to meet its obligations when they fall due. Our approach to managing liquidity is to ensure, as far as possible, that we always have sufficient liquidity to meet our liabilities when they are due, under both normal and stressed conditions. We manage this through short-term cash forecasting, with longer-term forecasts supplemented by government's funding commitment under the Road Investment Strategy.

The company believes that its contractual obligations, including those shown in commitments and contingencies in notes 15, 7.5.1, 7.5.2 and 12c, can be met in the short term from existing cash and other current assets, and the funding it receives annually that is voted by Parliament. The longer-term needs are met from the funding commitment provided by government through the Road Investment Strategy.

Cash reserves were run down at the year-end to facilitate additional payment requests made at short notice from the supply chain, this was discussed and agreed with DfT who provided the additional funding the following working day; the company does not have an overdraft facility and the credit balance relates to the timing of payment recognition.

	31 March 2023				31 March 2022
	Not later than one year £000	Later than one year and not later than five years £000	Later than five years £000	Total £000	Total £000
Contractual cashflows					
Non-derivative financial liabilities					
Trade payables	795,143	–	–	795,143	817,394
Future Lease Commitments	17,184	34,908	10,382	62,474	53,839
Finance lease liabilities (PFIs)	97,928	318,322	757,363	1,173,613	1,265,611
Other non-interest bearing liabilities	111,119	36,219	–	147,338	160,234
	1,021,374	**389,449**	**767,745**	**2,178,568**	**2,297,078**

10.3 Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates will affect the company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures where these are considered to materially impact the business and operations of the company.

10.4 Interest rate risk

This is the risk that the company will suffer financial loss due to interest rate fluctuations. The company's financial assets and its financial liabilities carry nil or fixed rates of interest, therefore the company is not exposed to significant interest rate risk.

10.5 Exchange rate risk

This is the risk that the company will suffer financial loss due to changes in exchange rates. The company undertakes a small number of foreign currency transactions primarily in Euro and is not exposed to significant exchange risk. Given the quantum of transactions in foreign currency, the company has assessed that a strengthening or weakening of Euro will not have any significant impact on the financial statements.

11. Going concern

The Statement of Financial Position (SoFP) as at 31 March 2023 shows net current liabilities of £904.7 million.

The company's liabilities due to be settled after 31 March 2023 will be paid for through funding from the company's sponsoring department, the Department for Transport (DfT). The company's 2023–24 funding has been included in His Majesty's Treasury Main Estimate which has been approved by Parliament.

The Directors have a reasonable expectation that the company has adequate resources to operate for the foreseeable future. The financial statements are therefore prepared on a going concern basis.

In forming this view the Directors/management have:

1) reviewed the company's future funding commitments received from government through the publication of the second Road Investment Strategy (RIS2), which sets out the £24 billion resource and capital funding that the company will receive during the five years from 2020–21 to 2025–26
2) kept DfT fully aware of commitments made which stretch beyond the period covered by the RIS2 period
3) reviewed internal budgets, plans and cash flow forecasts
4) reviewed DfT's Main Estimate for 2023–24

Unrecognised Items

The following items are disclosed in the accounts but not recognised in the financial statements.

12. Contingent liabilities disclosed under IAS 37

A contingent liability is a potential liability that may occur depending on the outcome of an uncertain future event; they do not meet the criteria for a provision. Unless their likelihood is considered to be remote, the company discloses them as contingent liabilities.

Under IAS 37 contingent liabilities are not recognised in the statement of financial position but are required to be disclosed in a note to the accounts.

	31 March 2023 £000	31 March 2022 £000
Contingent liabilities	10,499	12,946
	10,499	**12,946**

Contingent liabilities include partial claims from third parties who have suffered damage or injury as a result of the SRN being damaged, and a number of arbitration cases in respect of contractual claims for engineering and construction services. These claims are estimated based on prior years' experience.

The Historic Estate assets which are held by the Secretary of State for Transport, together with any related contingent liabilities, are included in DfT's accounts.

12.1 Remote contingent liabilities

Under IFRS contingent liabilities that are considered to be remote are not disclosed; however, their narrative disclosure is required by the FReM.

A contingent liability is a potential liability that may occur depending on the outcome of an uncertain future event; they do not meet the criteria for a provision. These are disclosed in note 12 of the accounts.

Remote contingent liabilities occur where the possibility of future settlement is very small.

The company holds indemnities embedded within some procurement contracts. These indemnities are a promise by the company to compensate another for losses suffered as a consequence of works undertaken on the SRN. Indemnities provide security against or exemption from legal liability where asset damage, contamination or loss of income may arise.

Our most significant indemnities relate to works which impact upon statutory undertakers (SUs) for example; to negate risks created by the requirement to move, or when we are working close to, a gas main or electricity infrastructure when building a new stretch of road. The approximate value of these indemnities is dependent upon the outcome of uncertain events and as such they cannot be accurately estimated. The potential to incur significant losses as the result of work impacting upon SUs is considered to be highly remote.

13. Contingent assets

A contingent asset arises where an event has taken place that gives the company a possible asset whose existence will only be confirmed by the occurrence of uncertain future events which are not wholly within the control of the company.

Contingent assets are disclosed under IAS 37 where it is probable that there will be an inflow of economic benefits.

The company seeks to dispose of property surplus to requirements promptly at the best price reasonably obtainable in the market. Sometimes there is uncertainty over potential use of the property and planning permissions, and in these cases the company may decide to sell the property at the underlying land value.

In these circumstances, the company will incorporate a 'claw back' clause into the terms of the sale, under which it is able to reclaim a percentage of any increase in value arising from a grant of planning permission, for a given term after the sale has been agreed.

As it is not known for some years after the initial disposal whether any further income will arise, the company has an unquantified contingent asset relating to future values.

14. Third party assets

Third party assets exist where the company undertakes work which is funded by another party, such as a developer, where the development may have an impact on the SRN. Under Section 278 of the Highways Act 1980, the company receives payment in advance of works. The amounts received are paid into interest-bearing Escrow Accounts. Monies are drawn down from the Escrow Accounts by the company as work progresses.

These bank accounts are not company assets and therefore are not included in the company's SoFP.

	31 March 2023 £000	31 March 2022 £000
Lloyds Bank Escrow Accounts	562	631
Total	**562**	**631**

15. Commitments

	31 March 2023 £000	31 March 2022 £000
Contracted capital commitments not otherwise included in these accounts:		
Property, plant and equipment	**1,578,969**	2,069,653

The company's capital commitments as at 31 March 2023 include the following significant project commitments:

- £365 million to A417 Missing Link: A landscape-led highways scheme that will deliver a safe and resilient free-flowing road while conserving and enhancing the special character of the Cotswolds Area of Outstanding Natural Beauty. The scheme will improve the connection between two dual carriageway sections of the A417 at Brockworth and Cowley.
- £279 million at M25 Junction 10: Upgrading the junction with the A3 Wisley Interchange to reduce congestion, improve safety and create more reliable journeys

- £160 million relating to A63 Castle Street: Create a new junction by lowering the level of the A63 at the Mytongate junction. Improvements will improve access to the port, congestion, safety and connections between the city centre and the tourist and recreational facilities.
- £93.4 million relating to A30 Chiverton to Carland Cross: Upgrading the A30 single carriageway between Chiverton Cross and Carland Cross roundabouts to relieve congestion. Funding for this scheme includes a contribution from the European Regional Development Fund of £8 million towards its development costs, with a further £12 million allocated for the construction phase.
- £84 million relating to A1 Birtley to Coal House widening: The project will involve widening of the A1 south of Gateshead to four lanes on the southbound carriageway and three lanes with lane gain on the northbound carriageway to provide additional capacity.
- £56.8 million relating to M6 junction 21a – 26: Upgrading work in the central reservation and verges continues between junctions 23 and 26.
- £53.5 million relating to A303 Sparkford - Ilchester: We're upgrading a three-mile section of the A303 between Sparkford and Ilchester, to make the road safer and more reliable. The delivery of this scheme is part of a long-term aim to create a high-quality dual carriage way link between London and the South East and the South West.

16. Events after the reporting period

On 15 April 2023, the Prime Minister cancelled new smart motorway schemes, acknowledging concerns over road user trust and cost. Following this announcement we have removed fourteen smart motorways schemes from our delivery programme. We have estimated that £62 million has been spent on the cancelled elements of the fourteen schemes, and our SRN asset balance will be written down by this value as part of the preparation of the 2023–24 financial statements. The event has been treated as non-adjusting to the 2022–23 statements as the indicative conditions of cancellation were not in existence at year-end.

International Accounting Standards require National Highways to disclose the date on which the accounts are authorised for issue.

The Accounting Officer has authorised these accounts to be issued on the date they were certified by the Comptroller and Auditor General.

Other Information

17. Related party transactions

The company is an arm's length body of DfT which is regarded as a controlling related party. The company's primary source of funding is through DfT, based on approved expenditure that is voted on by Parliament. The total amount of funding received from DfT for the year ended 31 March 2023 amounted to £4.5 billion (2021–22 £4.5 billion). During the year, the company had a number of other transactions with DfT, amounting to -£0.5 million (2021–22 £2.2 million). In addition, the company had transactions with other government departments, agencies and local authorities, in particular HM Revenue and Customs £95.3 million (2021–22 £95.3 million) and Cambridgeshire County Council £25.8m (2021–22 £2.3 million). Key management personnel compensation is disclosed in the remuneration report.

18. Losses and special payments

Managing Public Money requires a statement showing losses and special payments by value and by type to be shown where they exceed £300,000 in total and those that, individually, exceed £300,000. Losses may relate to cash and store losses, bookkeeping losses, losses arising from a failure to make adequate charge for the use of public property or services, fruitless payments and claims abandoned as well as frauds. Special payments may relate to extra-contractual, extra-statutory and ex gratia payments and compensation.

(a) Losses statement

	Year to 31 March 2023	Year to 31 March 2022
Total number of losses		
Constructive losses	–	1
Bookkeeping/cash losses	5	17
Claims abandoned	2,929	5,551
Store losses	2,709	2,879
Total	**5,643**	**8,448**

	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Total value of losses		
Constructive losses	–	–
Bookkeeping/cash losses	52	9,684
Claims abandoned	6,981	13,512
Store losses	9,813	13,448
Total	**16,846**	**36,644**

Details of cases over £300,000

Constructive losses

These losses relate to procurement action causing the loss, this may be due to a change in policy that renders the stores or services less useful or not required at all. There are no constructive losses greater than £300,000 in the period to 31 March 2023.

Bookkeeping/cash losses

These losses relate to accounting corrections and losses not considered viable or value for money to pursue. There were no book keeping or cash losses greater than £300,000 in the period to 31 March 2023.

Claims abandoned

These losses largely relate to damage to the road network and traffic management clean-up costs, where the culprit is unknown, and it is not viable to pursue the claim. There was no abandoned claim greater than £300,000 in the period.

Store losses

These losses largely relate to theft or vandalism to SRN equipment where the culprit is unknown. This includes cables, fencing, barriers, communication equipment, signs or lighting. There were no store losses with a value greater that £300,000 in the period to 31 March 2023.

(b) Special payments

	Year to 31 March 2023	Year to 31 March 2022
Total number of special payments		
Ex gratia payments/compensation	18	12

	Year to 31 March 2023 £000	Year to 31 March 2022 £000
Total value of special payments		
Ex gratia payments/compensation	1,669	14,200

Details of cases over £300,000

There was one special payment with a value greater than £300,000 which relates to the building of a new roundabout on the A428 Black Cat to Caxton Gibbet project for £1,116,000.

Dart Charge losses

National Highways operates the Dartford-Thurrock River Crossing Charging Scheme on behalf of the Secretary of State. During 2021–2022, management write off was £1.7 million (2020–21: £3.6 million) of the RUC receivable and £37.0 million (2020–21: £36.7 million) of the enforcement receivable. These amounts have been impaired on the basis of their recoverability, which is characteristic of all penalty charging regimes. Losses are disclosed in the DfT accounts and further details are provided in the 2021–22 Dartford-Thurrock River Crossing Charging Scheme Account.

19. Summary of significant accounting policies

This section provides additional information about the overall basis of preparation the Directors consider to be useful and relevant to understanding these financial statements.

19.1 Basis of preparation

These financial statements have been prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006.

Where IFRS permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to give a true and fair view has been selected. The key accounting policies adopted are described below. They have been consistently applied in dealing with items considered material to the accounts.

19.2 Measurement convention

The financial statements have been prepared on an historical cost basis, except where specific departures, including fair value, are described. Historical cost is a measure in which the value of an asset on the balance sheet is recorded at its original cost when acquired by the company. In subsequent periods that recorded cost is not updated for any increase in prices, although it may be adjusted for falls in value. See note 10.1).

19.3 Revenue recognition

The accounting policies for the company's revenue streams are explained in note 2.

19.4 Grants

Grants are recognised in the accounts where there is reasonable assurance that they will be received. Grants that relate to specific capital expenditure with attached conditions are credited to deferred income in the Statement of Financial Position and are recognised in net expenditure over the assets' construction period. Grants for revenue expenditure are credited to net expenditure (see note 2).

The company makes a small number of grants to public sector, private sector and voluntary bodies. These grants are recognised at the point at which the grant agreement is authorised by all related parties.

19.5 Corporation tax

The company's corporation tax policy is outlined in note 5.

19.6 VAT

Many of the activities of the company are non-business in nature and for this reason, outside the scope of VAT. The company is eligible under section 41(3) of the VAT Act 1992 to recover input VAT which is recovered under an annual Treasury Direction. Irrecoverable VAT is charged to the relevant expenditure category or included in the capitalised purchase cost of non-current assets. Where output tax is charged or input VAT is recoverable, the amounts are stated net of VAT.

19.7 Leases

The company's leases policy is outlined in note 7.5.1.

19.8 Research and development

Expenditure on research is not capitalised. Development expenditure that does not meet the criteria for capitalisation is also treated as an expense and shown in net expenditure in the year in which it is incurred.

19.9 Impairment of financial assets
The company assesses at each balance sheet date whether there is objective evidence that financial assets are impaired.

Under IFRS 9 we employ a forward-looking expected loss model. This means that we consider current and forward-looking information to assess whether a historic event or the potential for a future event has an impact on estimated future cash flows.

Financial assets are grouped based on similar risk characteristics, considering asset type, industry, geographical location, collateral type, overdue status and other relevant factors. These characteristics are relevant to the estimation of future cash flows as they are indicative of the counterparty's ability to pay all amounts due according to the terms of the contract.

The future cash flows relating to loans and receivables are used to evaluate any impairment of the assets, the amount of impairment loss is the difference between the asset's carrying amount and the present value of estimated future cash flows.

The methodology and assumptions used for estimating future cash flows are reviewed regularly to minimise differences arising between loss estimates and actual losses incurred.

19.10 Cash
Cash comprises bank balances held with the Government Banking Service and commercial bank accounts.

19.11 Receivables
Trade receivables and accrued income are classified as financial assets held at amortised cost in accordance with IFRS 9.

Receivables are recognised initially at fair value, plus transactional costs. Fair value is usually the contractual value of the transaction. Thereafter, receivables are held at amortised cost. See note 7.2 for further information about the accounting for trade receivables and note 19.9 for a description of the company's impairment policies.

19.12 Non-current and current assets
For full details of the accounting policies governing non-current assets, being; property plant and equipment, intangible assets, assets held for sale and inventory, together with full details of their application, see note 6.

19.13 Financial liabilities
Financial liabilities are any contractual obligations to deliver cash or other financial assets to a third party including trade and other payables (current and non-current).

The company values liabilities initially at fair value; the transaction value is considered to be the fair value at the date of recognition. Thereafter, where the time value of money is considered to be material, they are held at amortised cost using the effective interest rate to discount cash flows.

Derecognition (i.e. removal from the financial statements) occurs when the liability has been settled. For more information on trade and other payables see note 7.3.

19.14 Provisions

Provisions are recognised when the company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. The measurement of the provision is based upon the best estimate of the expenditure required to settle the obligation.

Provisions are charged to the Statement of Comprehensive Net Expenditure unless they relate to capital projects. In which case, the provision is added to the assets' carrying amount. Provisions are discounted where the effect is material. For more information about the provisions that we hold see note 7.4.

19.15 Contingent liabilities

Contingent liabilities are disclosed under IAS 37 in note 12.

The company discloses as contingent liabilities:

- potential future obligations arising as a result of past obligating events, where the existence of such an obligation remains uncertain pending the outcome of future events outside of the company's control and
- present obligations arising from past events that are not recognised because it is not probable that an outflow of resources will be required to settle the obligation, or the amount of the obligation cannot be measured with sufficient reliability

Where the time value of money is material, contingent liabilities are stated at discounted amounts.

19.16 Contingent assets

A contingent asset arises where an event has taken place that gives the company a possible asset whose existence will only be confirmed by the occurrence of uncertain future events which are not wholly within the control of the company.

Contingent assets are not recognised in the Statement of Financial Position but are disclosed under IAS 37, in note 13, where there will be a probable inflow of economic benefits.

19.17 Service concessions – PFI contracts

Service concession contracts, otherwise known as PFI contracts, are accounted for in accordance with IFRIC 12. The related policies are disclosed in note 7.5.

19.18 Employee benefits

Policies surrounding staff costs, including performance related bonuses, holiday pay termination costs and pensions, are disclosed in note 3.1.

19.19 Reserves

For full details of equity and reserves see note 8.

20. New and amended standards

The company has reviewed all new accounting standards, amendments and interpretations of standards that are effective during the period ending 31 March 2023. No new standards have been applied for the year ended 31 March 2023.

21. Standards not yet adopted

IFRS 17 Insurance Contracts, is on the horizon and comes into effect for reporting periods commencing after 1 January 2023. It requires a discounted cash flow approach to accounting for insurance contracts. National Highways currently has no contracts which meet the standard definition of insurance contracts; however, further consideration as to whether our indemnities fall within the scope of the standard is to be made.

22. Changes in accounting policy

There have been no changes to accounting policy impacting upon the company's financial statements in this financial period.

23. How our financial statements tie to our funding

As a publicly owned body, the company obtains funding through the government estimates process and our financial performance feeds into the Whole of Government Accounts (WGA).

There are some discrepancies between the accounting treatment for financial accounting purposes (under IFRS) and for budgetary purposes (under FReM), which means that we are required to reconcile our financial statement results to the WGA budgetary totals.

As a result of the implementation of the Treasury's Alignment project in 2011–12, most differences between the financial accounts and budgets have now been removed. The majority of transactions should therefore be recorded in budgets at the same value and with the same timing as recorded within the financial accounts. There are however some outstanding misalignments; those relevant to the company are set out below:

Capital Income: Income that counts as capital transfers in the national accounts, such as third party payments to finance the construction of an asset, passes through capital budgets. This income remains in the SoCNE for financial accounting purposes.

Research and development (R&D): R&D expenditure that meets the criteria under the National Accounts is recorded as capital in budgets. This differs to the treatment in the financial accounts where research expenditure is usually expensed in the SoCNE.

In order to reflect the inconsistencies in accounting treatment we produce a segmental report, see note 23.1, which provides a visual reconciliation between our financial position from a budgeting (FReM) perspective to our statutory financial statements.

In the interests of ensuring that our annual report is aligned to the requirements of our stakeholders, much of the financial review (see pages 19 to 20) aligns to our funding allowance and not directly to the financial statements.

23.1 Segmental report

The segmental report shown below provides a reconciliation between our financial position from a funding perspective to our statutory financial statements.

Notes:

- Operating segments are business activities that are regularly reviewed by the company's Board and senior management for decision-making purposes.
- Expenditure in the financial statements is split between capital and resource expenditure.
- Asset renewals are a programme of SRN renewals expenditure to ensure the infrastructure continues to deliver according to the service potential, including a significant resurfacing programme.
- Asset improvements include an agreed programme of major improvements expenditure which contributes significantly to increasing capacity and removing bottlenecks.
- Maintenance expenditure relates to lump sum duties including winter maintenance, pot hole repairs, drainage clearing and grass cutting.
- Operate expenditure includes the costs of strengthening the company's SRN management function, maximising SRN availability and reducing the impact of incidents and recurrent congestion.
- Corporate support expenditure includes the resources to help deliver the programme; including staff costs, IT and research and development.

	Year to 31 March 2023					
	Resource expenditure £000	**Resource income £000**	**Resource total £000**	**Capital expenditure £000**	**Capital income £000**	**Capital total £000**
Total by segment						
Asset renewals	–	–	–	908,832	–	908,832
Asset improvements	–	–	–	1,740,359	(14,081)	1,726,278
Traffic management	–	–	–	2,372	–	2,372
Other	–	–	–	573,190	–	573,190
Operations and maintenance	480,625	(43,391)	437,234	–	–	–
Operate: roads PFI	453,485	–	453,485	–	–	–
Corporate support	261,286	(7,802)	253,484	–	–	–
Business services	36,017	(1,764)	34,253	–	–	–
Protocols	66,541	(665)	65,876	–	–	–
	1,297,954	**(53,622)**	**1,244,332**	**3,224,753**	**(14,081)**	**3,210,672**
Unallocated costs:						
Depreciation and impairment	1,338,578	(2,837)	1,335,741	–	–	–
Provision utilisation	(1,616)	–	(1,616)	–	–	–
New provisions	(3,982)	–	(3,982)	171,157	–	171,157
Other	(104)	–	(104)	(57,456)	–	(57,456)
(FReM) total	**2,630,830**	**(56,459)**	**2,574,371**	**3,338,454**	**(14,081)**	**3,324,373**
Budget to accounts reconciliation						
Capital income in resource transfer	–	(14,081)	(14,081)	–	14,081	14,081
R&D capital transfer	13,887	–	13,887	(13,887)	–	(13,887)
Other	–	–	–	–	–	–
Segmental total per accounts	**2,644,717**	**(70,541)**	**2,574,177**	**3,324,567**	**–**	**3,324,567**

	Year to 31 March 2022					
	Resource expenditure £000	**Resource income £000**	**Resource total £000**	**Capital expenditure £000**	**Capital income £000**	**Capital total £000**
Total by segment						
Asset renewals	–	–	–	877,477	–	877,477
Asset improvements	–	–	–	1,877,070	(49,485)	1,827,585
Traffic management	–	–	–	3,541	–	3,541
Other	–	–	–	481,312	–	481,312
Operations and maintenance	553,549	(47,898)	505,651	–	–	–
Operate: roads PFI	419,504	–	419,504	–	–	–
Corporate support	156,352	(6,127)	150,225	–	–	–
Business services	43,797	(4,846)	38,951	–	–	–
Protocols	64,399	(936)	63,463	–	–	–
	1,237,601	**(59,807)**	**1,177,794**	**3,239,400**	**(49,485)**	**3,189,915**
Unallocated costs:						
Depreciation and impairment	1,216,623	–	1,216,623	–	–	–
Provision utilisation	(6,342)	–	(6,342)	(72,121)	–	(72,121)
New provisions	15,658	–	15,658	(83,731)	–	(83,731)
Other	(996)	–	(996)	77	–	77
(FReM) total	**2,462,544**	**(59,807)**	**2,402,737**	**3,083,625**	**(49,485)**	**3,034,140**
Budget to accounts reconciliation						
Capital income in resource transfer	–	(49,485)	(49,485)	–	49,485	49,485
R&D capital transfer	12,456	–	12,456	(12,456)	–	(12,456)
Other	–	–	–	–	–	–
Segmental total per accounts	**2,475,000**	**(109,292)**	**2,365,708**	**3,071,169**	**–**	**3,071,169**

1 The Red Book contains global mandatory rules, best practice guidance and related commentary for all cost estimators undertaking asset valuations and is clear that valuations for inclusion in financial statements must comply strictly with the financial reporting standards adopted by the company.

2 Note: VAT is non-recoverable on 'greenfield' site expenditure so the depreciated replacement cost includes non-recoverable VAT of 20%.

3 Statutory undertaker is a legal term used to describe those organisations and agencies that have certain legal rights and obligations when carrying out particular development and infrastructure work. Typically, they are utilities and telecoms companies.

4 Hybrid schemes are those schemes which take place partially within and partially outside of the network boundary. They are significant as the company can only recover VAT on construction work which takes place on the existing SRN.

5 COS headings refer to tax directions issued by HMRC to allow for VAT recovery on some Contracted Out Services (COS). Government organisations have been encouraged to contract out services to the private sector which would have traditionally been performed in-house. Many of these services are subject to VAT and, where they are acquired for 'non-business' purposes, the non-reclaimable VAT could act as a disincentive to contracting out. COS headings exist to remove any disincentive.

Glossary

Term	Definition
Adaptation Reporting Power	The Adaptation Reporting Power (ARP) directs organisations with functions of a public nature or statutory undertakers to report on how they are addressing current and future climate impacts.
All lane running	All lane running motorways add variable mandatory speed limits to control the speed and smooth the flow of traffic, and increase capacity by permanently converting the hard shoulder into a running lane. These motorways feature emergency areas, which are places to stop in an emergency. To further enhance safety, stopped vehicle detection technology is put in place on all these motorways.
Asset Delivery	Our approach to maintaining and improving our assets which is helping us improve our knowledge and increase our control, including over interventions, planning and sequencing.
BU	Biodiversity units, the measurement for biodiversity. The number of BU is based on the area of habitats, their distinctiveness and their condition; changes to these result in a change in BU.
BREEAM	The Building Research Establishment Environmental Assessment Method sets the standard for best practice in sustainable design and is used to describe a building's environmental performance.
CALM	Campaign Against Living Miserably
CHARM	Working with the Dutch Road Authority, we have jointly developed requirements for the next generation of traffic management systems: CHARM. This will provide a single IT platform for our control centres and our national traffic operations centre, as well as improving our systems and supporting infrastructure.
CO_2	Carbon dioxide
CRASH	Collision Recording and Sharing, a centralised system used by some police forces to record road traffic collisions.
DBFO	Design, Build, Finance and Operate contracts, also known as private finance initiatives (PFIs).

Term	Definition
Designated funds	Our designated funds are ringfenced funds separate to our core work. These help us provide essential wider investment for areas which otherwise would not receive funding.
Delivery plan	Our *Delivery plan* for the second road period provides the detail of specific funding, activities and projects we will deliver from 2020–25, as well as our performance framework.
DfT	Department for Transport
Design manual for roads and bridges	This contains information about current standards relating to the design, assessment and operation of motorways and all-purpose trunk roads in the UK.
DCO	Development Consent Order, which is the means of obtaining permission for developments categorised as nationally significant infrastructure projects.
Digital Roads	Our concept which is based on using connectivity, data and technology to improve the way the SRN is designed, built, operated and used.
Driving for Better Business	Our programme to help employers in both the private and public sectors reduce work-related road risk, decrease associated costs and improve compliance with current legislation and guidance.
DVSA	Driver and Vehicle Standards Agency
ECHO	Every Customer Has an Opinion, our real-time customer feedback platform.
EDI	Equality, diversity and inclusion
Enhancement scheme	Major projects, which range from small to large and complex schemes, which we use to improve the experience and capacity of our busiest roads, while also preparing for a digital future.
FBU	Fair, balanced and understandable reporting; the UK Corporate Governance Code requires corporate boards to confirm their annual reports are ‘fair, balanced and understandable’.
FTE	Full-time equivalent
GHG	Greenhouse gases
Greening Government Commitments	The Greening Government Commitments set out the actions that UK government departments and their agencies will take to reduce their impacts on the environment.

Term	Definition
Grey fleet	A grey fleet vehicle is one owned and driven by an employee for business purposes.
HGV	Heavy goods vehicle
Highways England	Our former name. In 2021, we changed our name from Highways England to National Highways.
Home safe and well	In June 2019, we launched *Home safe and well* – our integrated approach to health, safety and wellbeing, which underpins everything we do.
iRAP	The International Road Assessment Programme is an objective way of measuring, through a star rating approach, the level of safety that is ‘built in’ to a road.
KPI	Key performance indicator, which is a metric used to define and measure progress towards organisational objectives.
KSI	The number of people killed or seriously injured on our network.
Lean	A method which creates more effective business processes by eliminating wasteful practices and improving efficiency.
LED	Light Emitting Diode, which emits light when an electric current passes through it.
Licence	Our Licence sets out the Secretary of State’s aims, objectives and conditions for our organisation.
Metric	The individual measurements that we are judged on, that fit within our performance framework.
NAO	National Audit Office. National Highways’ appointed external auditor; external audit work is carried out by the NAO on behalf of the C&AG.
NPV	Net Present Value
Net zero	For National Highways, net zero means cutting greenhouse gas emissions to zero or near zero, rather than taking measures to offset emissions.
NO_2	Nitrogen dioxide
Operation Brock	This is a contraflow system designed to keep traffic on the M20 and other roads in Kent moving when there is disruption to travel across the English Channel.
ORR	Office of Rail and Road. The ORR are our monitor, responsible for monitoring the costs, efficiency

Term	Definition
	and performance of our company.
PAS 2080	PAS 2080 is a global standard for managing infrastructure carbon, aiming to reduce carbon and reduce cost through more intelligent design, construction and use.
PFI	Private finance initiatives, where private firms are contracted to complete and manage public projects. These relate to providers who built roads for us in the past and now maintain them.
Protocols	These are additional services which we carry out on behalf of the Secretary of State, including operating/collecting income on the Dartford River Crossing and managing national salt stores.
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulation (1995)
RNI	The roadworks network impact KPI, which replaced our network availability KPI from 2021–22. The RNI measures the amount of network impacted (not closed) by roadworks.
RIS1 and RIS2	These are government's long-term strategies for the SRN. RIS1 refers to the *Road investment strategy* for the first road period. RIS2 refers to the *Road investment strategy* for the second road period.
RP1 and RP2	The first and second road period, which are five-year planning cycles. The first road period ran from 2015–20, and the second will run from 2020–25.
SBTi	The Science Based Targets Initiative is a standard which ensures companies' targets translate into action consistent with achieving net zero by 2050.
Smart motorway	Smart motorway is a generic term for a section of motorway that uses traffic management methods to increase capacity and reduce congestion in particularly busy areas. These methods include using the hard shoulder as a running lane and using variable speed limits to control the flow of traffic. There are three types of smart motorway: all lane running, dynamic hard shoulder and controlled.
SMEs	Small and medium-sized enterprises
Spending review 2021	The Chancellor of the Exchequer presented his *Autumn budget and spending review* in October 2021, which sets departmental budgets up to 2024–25.
Strategic business	Our *Strategic business plan* responds to, and aligns with, government's RIS2. It provides the

Term	Definition
plan	high-level direction for every part of our company for the second road period.
SRN	Strategic road network, which consists of England’s motorways and major A-roads.
Strategic Roads User Survey	This survey, led by Transport Focus, is used to measure satisfaction among users of the SRN. The survey was paused in 2020–21 due to Covid-19 restrictions. We have worked with Transport Focus on an alternative method of data collection: Strategic Roads User Survey Online.
Sustainable drainage system	A natural system that filters rain that runs off the road and helps the removal of hydrocarbons, sediment and heavy metals.
TCFD	The G7’s Financial Stability Board created the Taskforce on Climate-related Financial Disclosures to improve and increase reporting of climate-related financial information.
tCO_2e	Tonnes of carbon dioxide equivalent, which is the amount of greenhouse gases emitted during a given period.
Transport Focus	Transport Focus are Britain’s independent watchdog for transport passengers and road users in the UK.

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