Annual Benchmarking Report

2022-2023

October 2023

Contents

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Glossary

AFR	Accident Frequency Rate
DfT	Department for Transport
dSBP	Draft Strategic Business Plan
KPI	Key Performance Indicator
KSI	Killed or Seriously Injured
PCM	Pollution Climate Mapping
PI	Performance Indicator
PS	Performance Specification
RIDDOR	Reporting of Injuries Diseases and Dangerous Occurrences Regulations
RIS	Roads Investment Strategy
RP	Road Period
RP2	Road Period 2 (covers period 1st April 2020 to 31st March 2025)
SRN	Strategic Road Network

Annual Benchmarking Report

1   Introduction

1.1   Overview

1.1.0   The introduction of National Highways' Annual Benchmarking Report reflects our ongoing commitment to increase transparency of our performance across the strategic road network and embrace benchmarking, using both internal and external data and intelligence.

1.1.1   Since the start of RP2, we have annually published regional data alongside our Performance Monitoring Statements[1]. This report is the next step in providing greater visibility and understanding of our regional performance. It enables performance comparisons to be made against previous years and across the different operating regions. It also enables us to understand links and dependencies between our performance indicators. The six National Highways regions are shown in Figure 1.
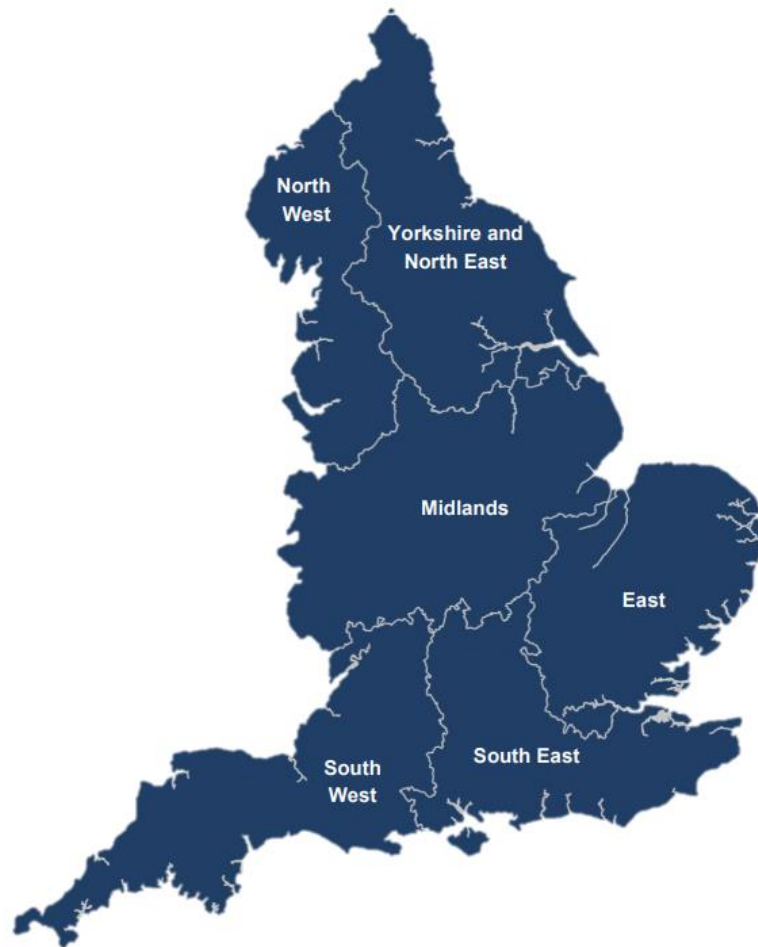
Figure 1 Regional composition of the National Highways Network

1.1.2   As data maturity and understanding increases, we can better identify learning opportunities from performance trends. Sharing insight increases knowledge sharing and learning between regions and enables us to drive continuous improvements across the network.

1.1.3   Over the last six years we have rolled out our Asset Delivery approach across the regions, with the final area moving to the new way of working in July 2022. This has

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[1] National Highways, PMS 2022-23 Performance Monitoring Statements
https://nationalhighways.co.uk/about-us/corporate-publications/

allowed our operational teams to be more actively involved in the inspection, monitoring, planning and programme development decisions for the needs of our assets. The Asset Delivery approach affords opportunities for consistent, informed and proactive asset and network management, and we are building on these to realise improved benefits to our customers through the service that we provide.

1.2   Report Structure

1.2.0   As a company our RIS performance commitments are set and monitored at a national level. Disaggregation of performance to a regional level allows better understanding and visibility of performance across the regions and enables continuous improvement. Our annual benchmarking report is based on the performance monitoring statements and provides a detailed comparison of our performance, disaggregated to a regional level.

1.2.1   The report is structured around five of the six key outcome areas outlined in the Performance Specification (PS):

- PS1 – Improving safety for all;
- PS2 – Providing fast and reliable journeys;
- PS3 – A well maintained and resilient network;
- PS4 – Being environmentally responsible; and
- PS5 – Meeting the needs of all users.

1.2.2   The sixth outcome area, 'PS6 - Achieving efficient delivery', is reported separately in the annual National Highways Efficiency Report[2]. As efficiency data is not disaggregated by region, it has not been presented as part of this report.

1.2.3   For each of the outcome areas listed above, the Performance Specification sets out the Key Performance Indicators (KPIs), against which we report our performance against national targets. The KPIs are supported by non-targeted Performance Indicators (PIs) against which we report performance trends. It is the regional breakdown of both KPIs and PIs that forms the basis of this benchmarking report. A full list of the indicators included in this report is shown in Figure 2.

1.2.4   Carrying out annual regional benchmarking on this basis enables us to improve knowledge and understanding of the factors driving performance, to monitor performance over time, and to understand regional differences. It also enables us to identify opportunities to improve performance and drive efficiency. By highlighting differences across the regions, we aim to generate smarter conversations and drive continuous improvement.

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[2] National Highways – Efficiency Report – Year 3 2020-2023
https://nationalhighways.co.uk/media/2gdp421u/ccs0623630894-001_-pn7235547-efficiency-report-4.pdf
Also refer to Performance Monitoring Statements for presentation of KPI data for this outcome area.
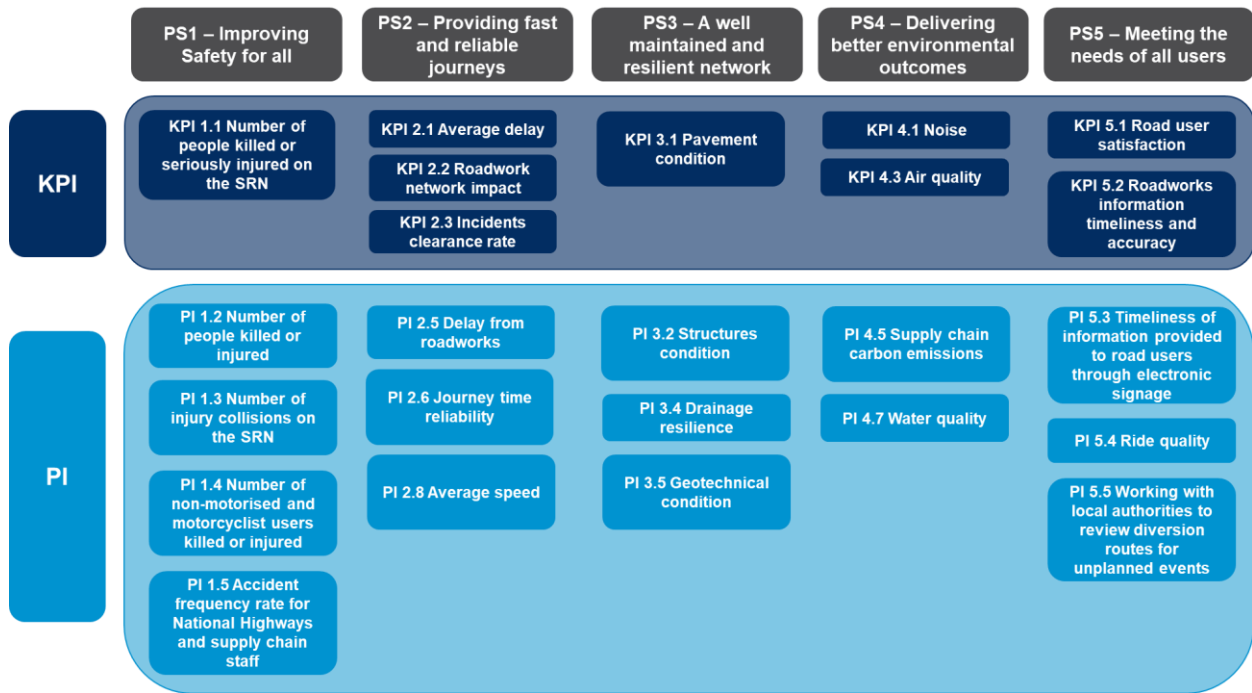
Figure 2 List of Indicators included in the Annual Benchmarking Report

1.2.5   For each of the outcome areas, the report sets out:

- **A description of the outcome area ('overview')** and the activities that are captured within it. This includes a summary of the relevant KPIs and PIs that underpin it and their methods of measurement.
- **A performance overview**, setting out relevant trends/activities for each of the KPIs and PIs. This includes an assessment of national performance and, where available, includes a narrative explaining the drivers of any regional differences. Central to this is the identification and explanation of factors affecting performance that are outside of our control (such as topography, traffic patterns, demographic and road configuration) and those performance levers that are within our control, including how they drive differences in outputs and outcomes.

1.2.6   As we continue to develop and mature as a company, we intend to explore more advanced and wide-ranging benchmarking data, to drive improvements in our business-as-usual activity and demonstrate efficient delivery. For example, other regional and non-regional ways to disaggregate performance data and data from other sources (for example Local Authority / international data) to use as comparators.

1.2.7   These are discussed in Section 7**Error! Reference source not found.**, which summarises the key lessons learned from regional knowledge sharing and producing this report. It also proposes future considerations to enhance performance reporting and further develop the Annual Benchmarking Report in future years.

1.2.8   The annex to this report contains:

- Annex A - National Highways 2022-23 Disaggregated Regional Performance
- Annex B - Regional infographics - providing a high-level description of the characteristics and features of each region.

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2   PS1 - Improving Safety for all

2.1   Overview

2.1.0   The safety of road users and its workers remains the first imperative for National Highways and has always been our top priority. There is a single KPI under the "Improving Safety for all" outcome and four PIs. These are listed in Table 1 below:

Table 1: Overview of safety metrics

Type	Description of Metric	Method / Unit of measurement
Key Performance Indicators 1.1	Number of people Killed or Seriously Injured on the SRN (KSI)	Number
Performance Indicators 1.2	Number of people killed or injured on the SRN	Number
Performance Indicators 1.3	Number of non-motorised and motorcyclist users killed or injured on the SRN	Number
Performance Indicators 1.4	Number of injury collisions on the SRN	Number
Performance Indicators 1.5a	The accident frequency rate for National Highways' staff	RIDDOR incidents normalised by number of hours worked per year
Performance Indicators 1.5b	The accident frequency rate for National Highways' supply chain staff	RIDDOR incidents normalised by number of hours worked per year

2.1.1   Safety is influenced by our maintenance of the network and its impact on road condition, our management of roadworks and incidents and our rollout of safety awareness campaigns. However, there are some variables impacting safety performance which are less easy to control or influence (for example driver behaviours, local weather and traffic demand), but that will contribute to the KPI / PI reported performance.

2.1.2   Safety is reported on an annual basis using STATS19 data published by the Department for Transport (DfT). Figures are typically released in late Summer and then reported by National Highways later in the year or early the following year. The latest available dataset is the 2021 dataset, for which the Road Safety Performance Overview [3] was released in Autumn 2023.

2.1.3   The safety initiatives which we have committed to by the end of 2022-23 are set out in the Delivery Plan[4]. Reference may also be made to the 2020 Road safety performance overview (July 2022)[5].

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[3] 2021 Road safety performance overview
https://assets.publishing.service.gov.uk/media/6512bec5f6746b000da4ba0f/2021_Road_Safety_Performance_Report_FINAL.pdf
[4] National Highways 2022/2023 Delivery Plan https://nationalhighways.co.uk/media/nu1jnm4l/delivery-plan-2022-23-july-8.pdf
[5] National Highways – 2020 Road Safety performance overview – July 2022.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1098935/GFD22_0088_2020_Road_Safety_Performance_Overview_V6_26-07-2022.pdf

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2.2   Key Performance Indicators

2.2.0   This section sets out high level trends in safety performance for the 2022 calendar year and provides commentary on regional performance against the different measures identified.

People killed or seriously injured on the SRN – KPI 1.1

2.2.1   The Department for Transport adjust KSIs at a national level to take account of differences in the way accidents were recorded by police forces across the country. This is discussed in the 2020 Road safety performance overview (July 2022). The figures provided in the regional disaggregated data for 2021, and for the 2021 data in Figure 3, are adjusted figures, and therefore cannot be directly compared to the 2019 and 2020 data sets.

2.2.2   As different police forces do not report data in the same way, regional data sets are not necessarily comparative (i.e. accident severity may have been recorded differently).

2.2.3   For 2021, the number of people killed or seriously injured on the SRN was 1,858 – (Figure 3). This is an adjusted figure. It ranges from 206 in the South West to 480 in the South East.

2.2.4   The 2020 and 2019 KSI figures are unadjusted (so can be compared to each other). It is important to note that 2020 was a unique year in terms of traffic volumes as fewer journeys were made on the strategic road network during the covid pandemic.

2.2.5   The national KPI target is to achieve a 50% reduction in KSI compared to a baseline of the annual average from 2005-2009. Progress has been made with a reduction of 20% against the baseline nationally since 2019.

2.2.6   Comparing datasets between the regions shows that generally the number of KSI has been similar or reduced compared to 2019 for most of the regions other than in the North West and the Midlands.
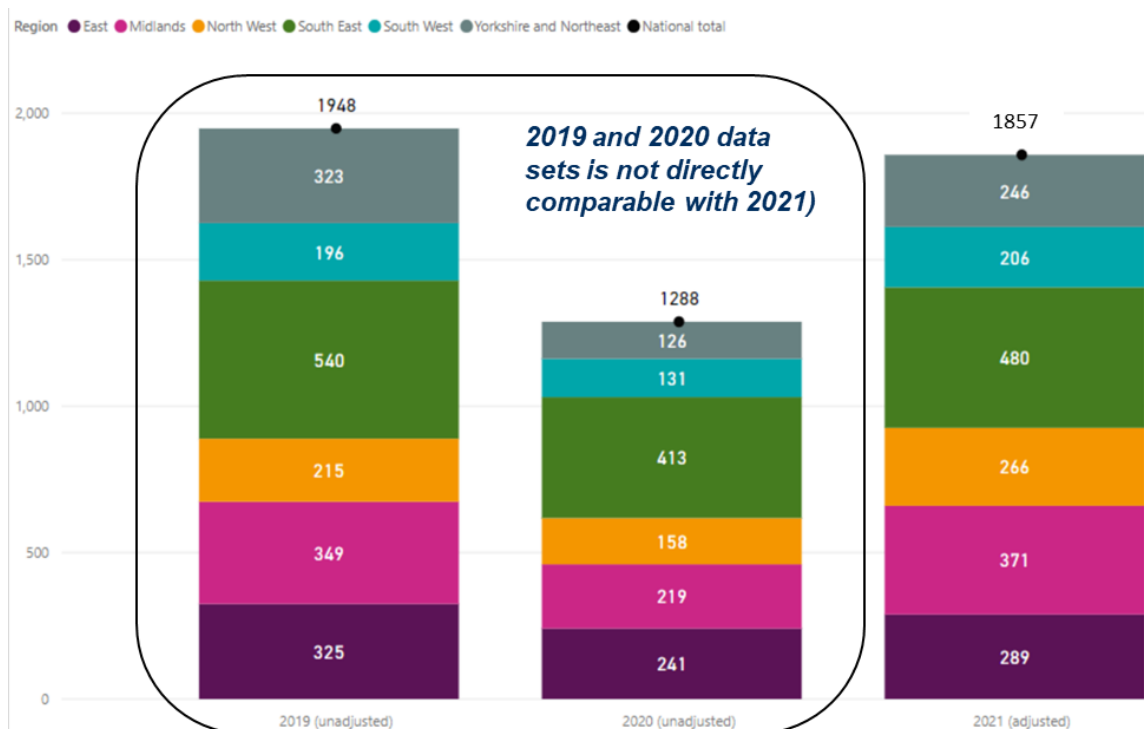

*Figure 3 KPI 1.1 Number of people killed or seriously injured on the SRN in 2019 to 2021 **(Note 2021 is adjusted data, therefore cannot be directly compared to the 2019 and 2020 data sets)***

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2.3   Performance Indicators

Number of people killed or injured – PI 1.2

2.3.0   Since 2019 we have recorded a decrease of 20.5% in the number of people killed or seriously injured across the network - from 12,347 in 2019 to 9,819 in 2021 (Figure 4 and 5).

2.3.1   The increase in casualties in 2021 compared to 2020 was expected, due to the significant covid related reduction experienced in 2020.

2.3.2   Improvement relative to 2019 was recorded in every region with decreases of between 9% (Midlands) and 28% (East).
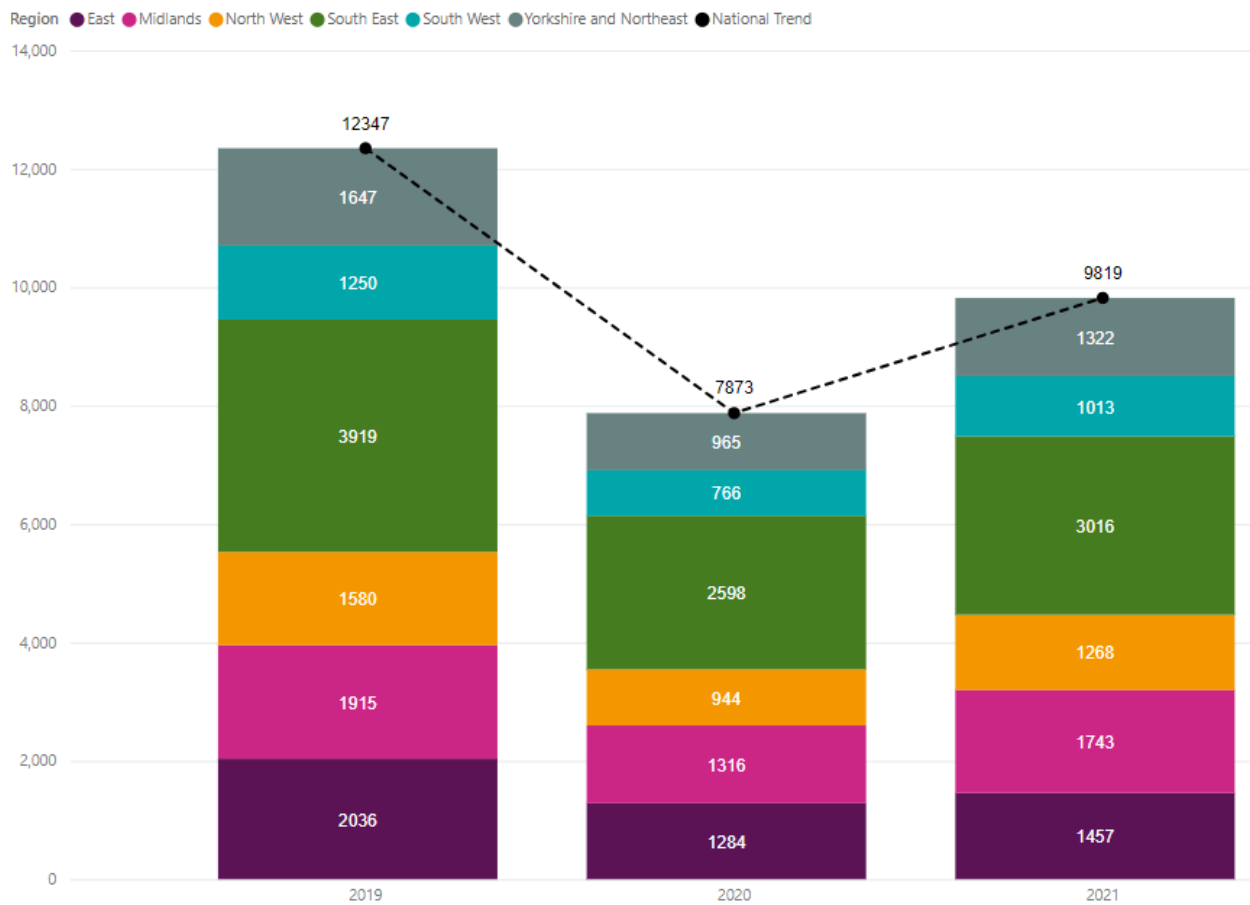

Figure 4 PI 1.2 number of people killed or injured on the SRN in 2019 to 2021
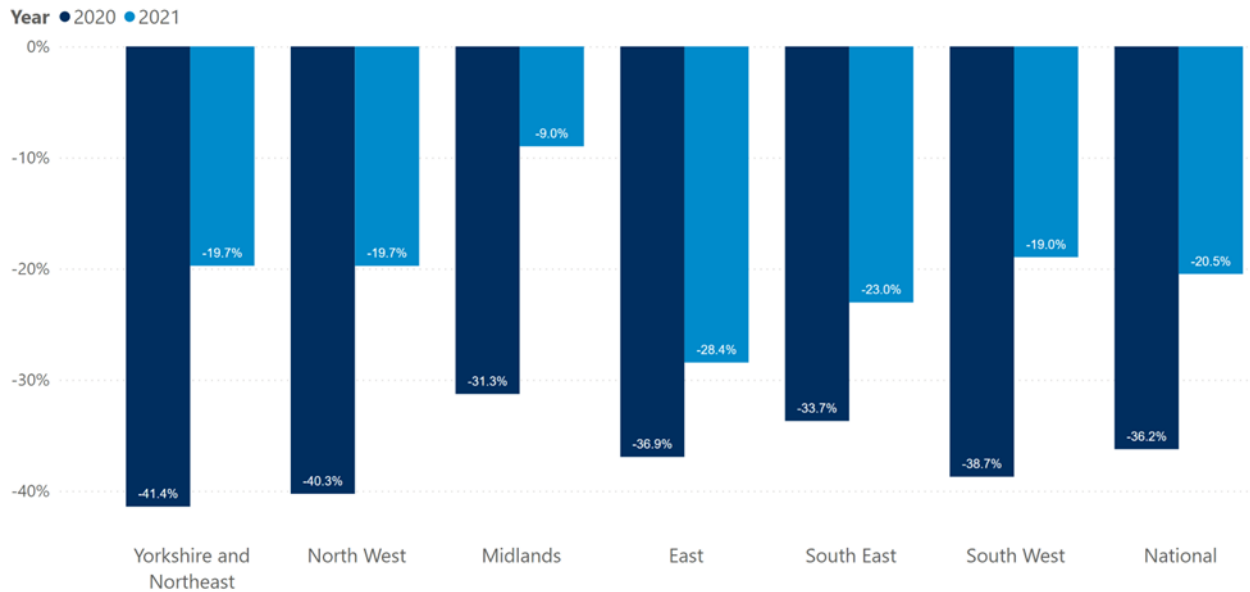
Figure 5 The percentage difference in the number of people killed or injured on the SRN in 2020 and 2021 when compared to 2019.

Number of injury collisions on the SRN – PI 1.3

2.3.1   This PI represents the number of collisions that result in at least one injury of any severity on the SRN. Nationally, the number of injury collisions has reduced by approximately 17% compared to 2019, from 7,905 in 2019 to 6,539 in 2021 as shown on Figure 6 (disregarding 2020 data).

2.3.2   All regions have shown improvement relative to 2019 (Figure 7) – with the East region showing the most improvement (25% reduction).
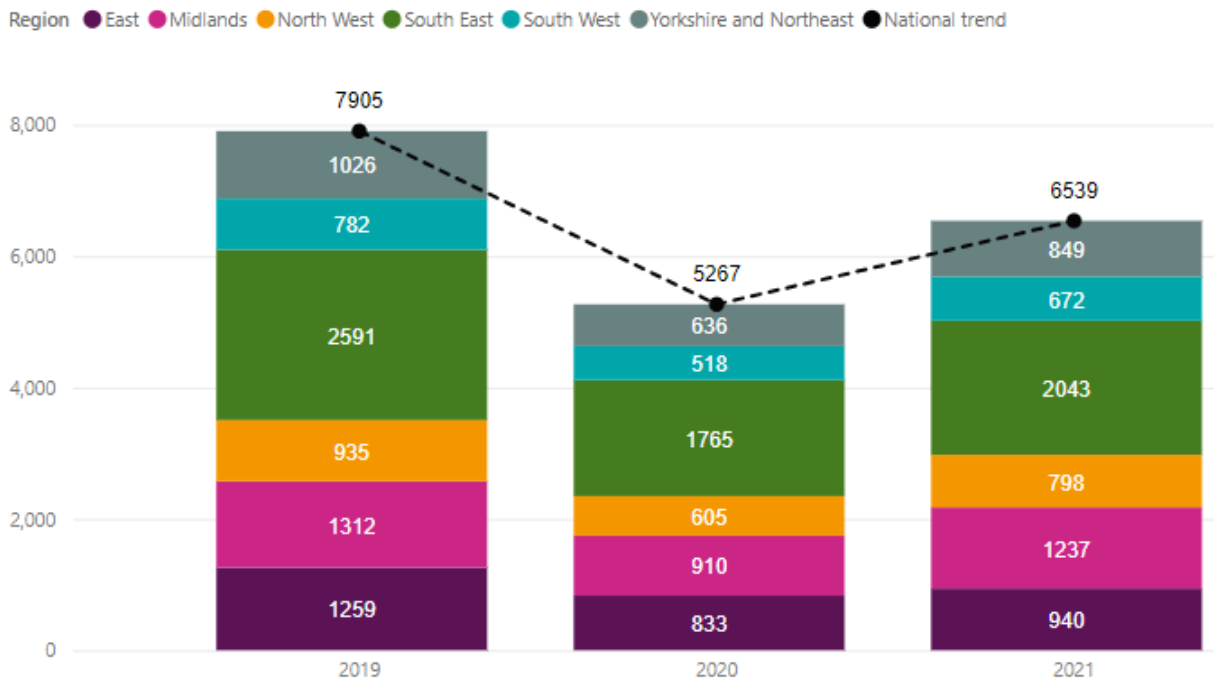

Figure 6 PI 1.3 the number of injury collisions on the SRN in 2019 to 2021
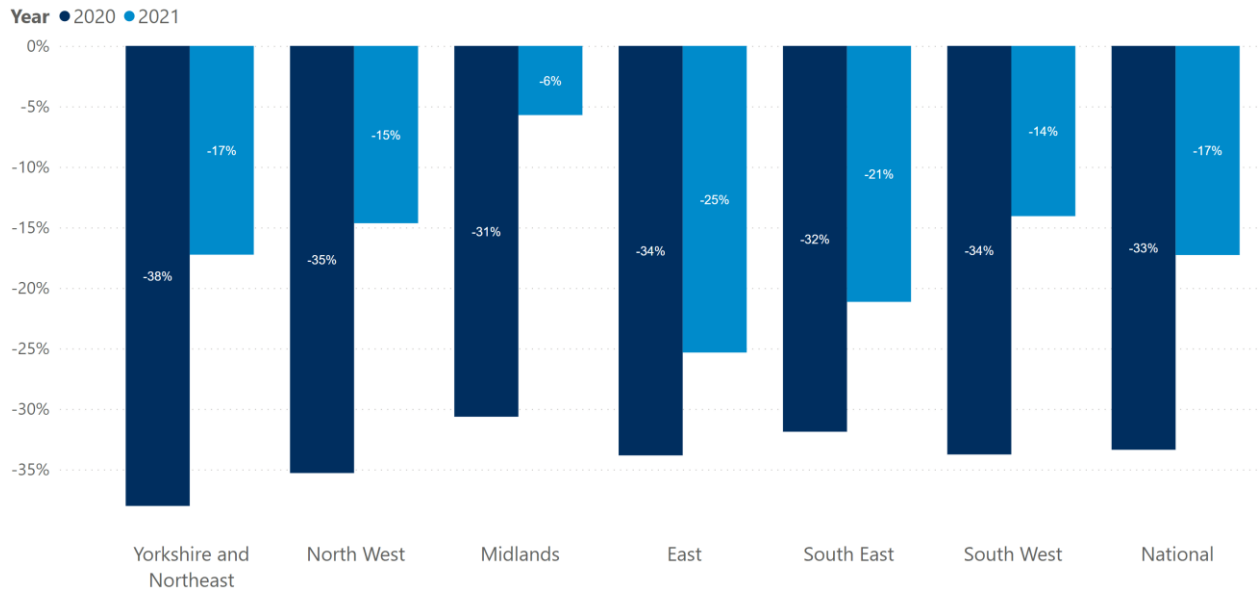
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Figure 7 The percentage difference in the number of injury collisions on the SRN in 2020 and 2021 when compared to 2019

Number of non-motorised and motorcyclist users killed or injured – PI 1.4

2.3.3   Nationally, there was a 17% reduction in the reported number of non-motorised and motorcyclist users killed or injured compared to 2019, from 962 in 2019 to 803 in 2021 (Figure 8).

2.3.4   Analysis shows regional variations in the percentage change in death and injuries compared to 2019. Yorkshire and Northeast showed 38% improvement whereas East had a 11% increase in casualties.
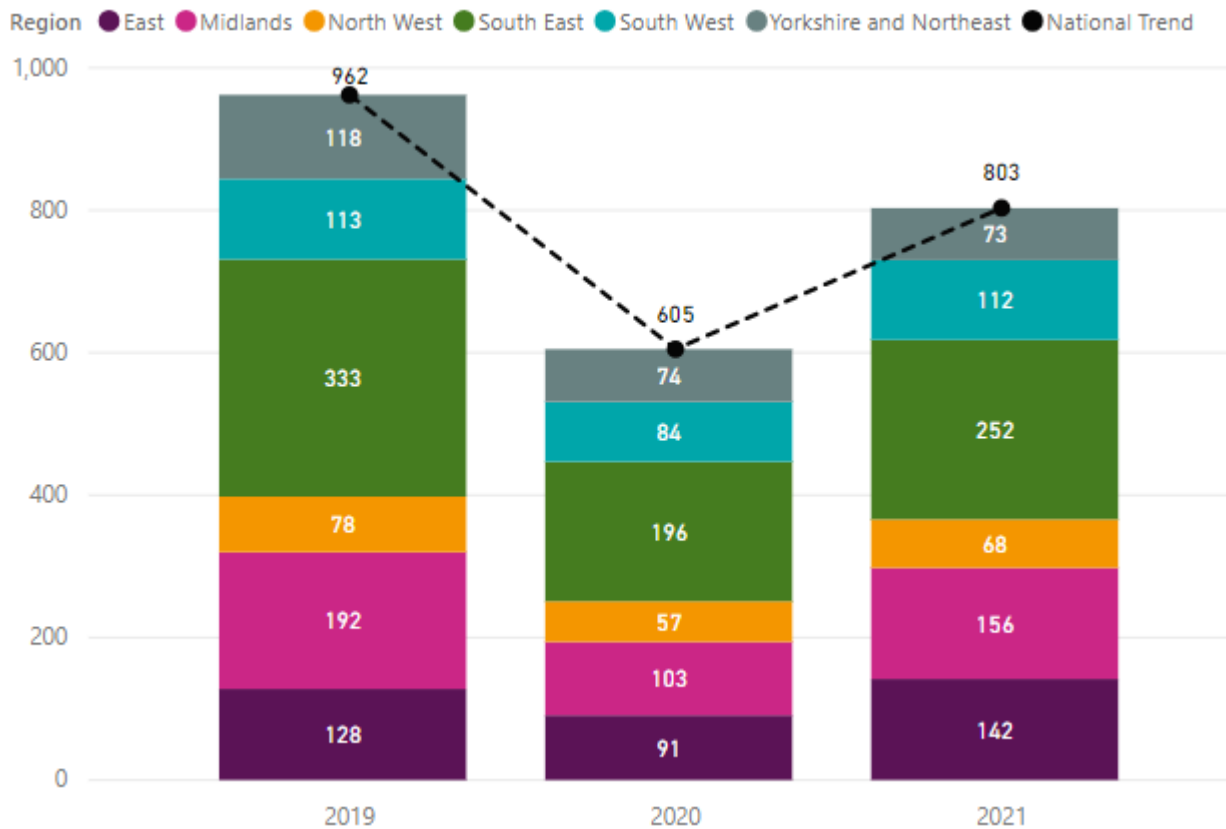

Figure 8 PI 1.4 the number of non-motorised and motorcyclist users killed or injured on the SRN in 2019 to 2021.
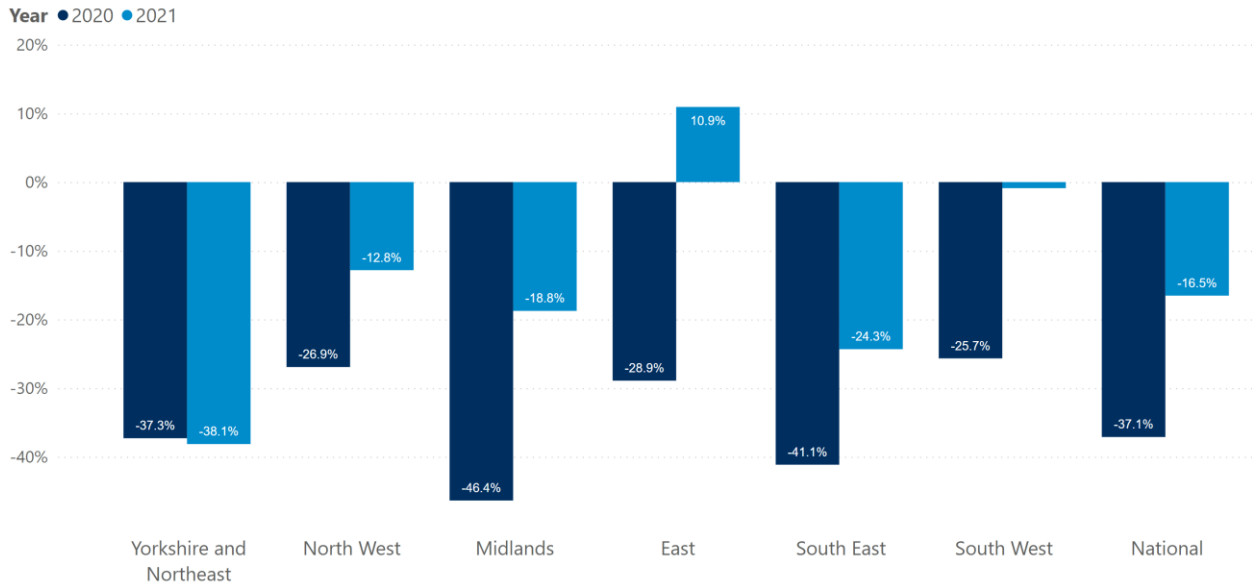
Figure 9 The percentage difference in the number of non-motorised and motorcyclist users killed or injured on the SRN in 2020 and 2021 when compared to 2019

Accident frequency rate for National Highways and supply chain staff – PI 1.5

2.3.5   Figure 11 shows the accident frequency rate (AFR) for National Highways staff and supply chain staff since 2019. This is based on Reporting of Injuries Diseases and Dangerous Occurrences Regulations (RIDDOR) incidents and normalised by the number of hours worked in a year. This measure is used to monitor performance in relation to the safety of the workforce on National Highways' network.

2.3.6   The AFR for National Highways' staff was 0.03 incidents per 100,000 hours worked for 2022-23. This is based on 4 RIDDORs and 14,907,857 hours worked. At national level, there has been an overall decrease in AFR. The national AFR is more representative in terms of showing trends as it is normalised by a larger number of worked hours.

2.3.7   Yorkshire and Northeast regions are the highest contributor to this rate, while East, South East and North West regions had 0 RIDDORs.

2.3.8   Overall, there may be large regional variations in the National Highways' staff reported AFRs. AFR sensitivity is affected by the variability in the numbers of staff and hours worked in the different regions.

2.3.9   For the wider supply chain, the AFR is 0.08 incidents per 100,000 hours worked. This is based on 28 RIDDORs and c 35million hours. There appears to be an increasing trend in the number of reportable accidents in the last three years, although some regions (South West, North West) have reported reductions.
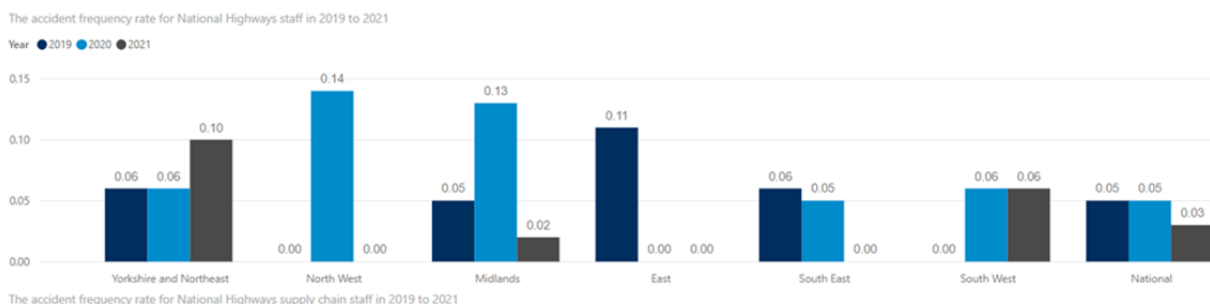
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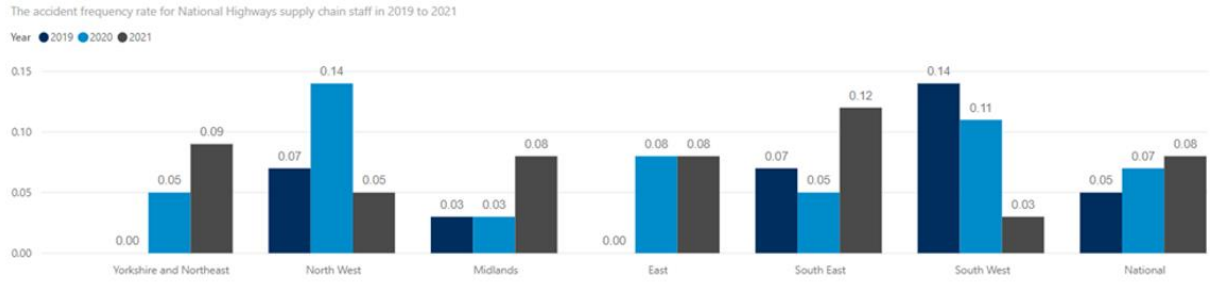*Figure 10 PI 1.5a the accident frequency rate for National Highways staff*

The accident frequency rate for National Highways supply chain staff in 2019 to 2021

Year ● 2019 ● 2020 ● 2021

Figure 11 PI 1.5b the accident frequency rate for National Highways supply chain staff

3   PS2 - Providing Fast and Reliable Journeys

3.1   Overview

3.1.0   Customer experience in terms of journey times and delay is represented by three KPIs and five PIs. Table 2 shows those KPIs and PIs where regional information is available. To support delivery of this outcome there are three strategic focus areas for National Highways as published in the Managing delay on the SRN plan[6]. These are optimising the network, innovating to address congestion, and reducing the impact of incidents.

Table 2: Overview of Providing Fast and Reliable Journeys metrics

Type	Description of Metric	Method / unit of measurement
Key Performance Indicator 2.1	Average delay to road users calculated as the difference between the observed travel time and the speed limit travel time	Seconds per vehicle mile
Key Performance Indicator 2.2	Roadworks network impact – captures the record of traffic management restrictions by length and duration on the SRN and applies a weighting for each traffic management category	Weighted lane meter days
Key Performance Indicator 2.3	Incident clearance rate - percentage of incidents on the motorway that impact traffic flow but are cleared in less than one hour	Percentage (%)
Performance Indicator 2.5	Delay from roadworks - the additional journey time during roadworks for all vehicle types, compared to an average benchmark journey time measured before the roadworks were in place.	Annual average delay in minutes per hour travelled
Performance Indicator 2.6	Journey time reliability – the average difference between observed and typical travel time.	Seconds per vehicle per mile
Performance Indicator 2.8	Average speed - the average speed of vehicles travelling on the strategic road network	Miles per hour (mph)

3.2   Key Performance Indicators

Average delay – KPI 2.1

3.2.0   The average delay across the whole network for 2022-23 is 9.5 seconds per vehicle per mile (Figure 12). This is an increase on previous years and is related to increasing traffic flows. Despite this, overall, the network is performing at the national KPI ambition level.

3.2.1   In nearly all regions there has been an increase in average delay since 2019. The rate of increase appears to have slowed, with the increase in delay in 2022-23 being in the region of one second. The exception to this is South West which consistently performs better than the other regions.

3.2.2   South West is generally less congested, with seasonal variation being a major factor.

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[6] Managing delay on the SRN plan https://nationalhighways.co.uk/media/wdopybqy/managing-delay-on-the-strategic-road-network.pdf

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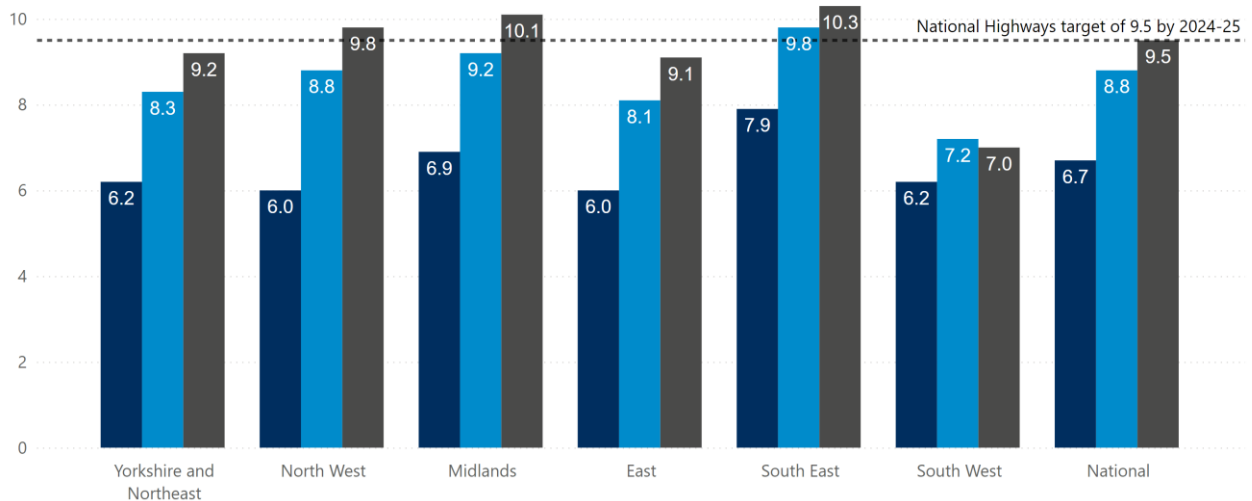
Year ●2020-21 ●2021-22 ●2022-23

Figure 12 KPI 2.1 Average delay in seconds per mile travelled

Roadwork Network Impact – KPI 2.2

3.2.3　The Roadworks Network Impact KPI measures the level of roadwork activity on the network and its impact on road users. It is measured by multiplying the lane metre days per month, by a weighted factor (which depends on the traffic management involved) and aggregating to a national total.

3.2.4　The measure was introduced in RP2 and consequently there is only one year of historical data for comparison.

3.2.5　For 2022-23, the total monthly average Roadworks Network Impact was below the national target of 47 million (weighted lane metre days) across the network and there was some marginal improvement on the reported 2021-22 figure.

3.2.6　It should be noted that the roadworks network impact is related predominately to capital expenditure, and therefore regions which have more renewals and enhancement schemes under construction would expect to have a higher impact.
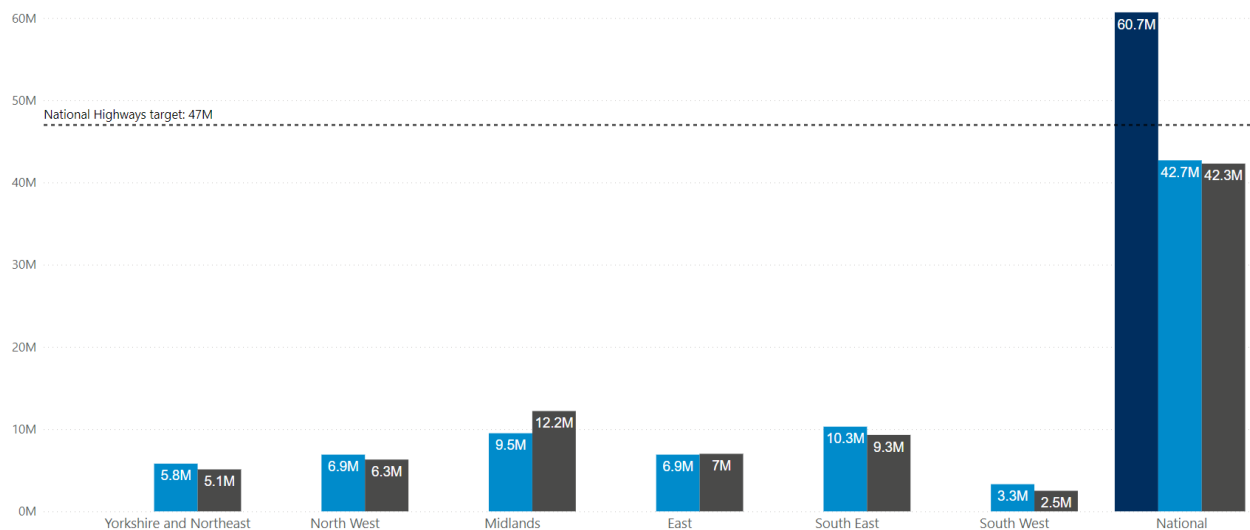
Year ●2020-21 ●2021-22 ●2022-23

Figure 13 KPI 2.2 Roadwork network impact (weighted lane meter days)

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Incident Clearance Rate – KPI 2.3

3.2.7   The incident clearance rate measures the ability of National Highways to restore service following an incident on the motorway. The KPI measures the percentage of incidents (that do not require roadworks but impact traffic flow) that are cleared within one hour.

3.2.8   The 2022-23 data shows 87.2% of incidents cleared within one hour, exceeding the target of 86%. There have been marginal changes in performance since 2020-21 at a national level.

3.2.9   The performance for incident clearance is consistent across the regions, with the Midlands performing better than other regions. It increased its performance by nearly 2% over the last reporting year.
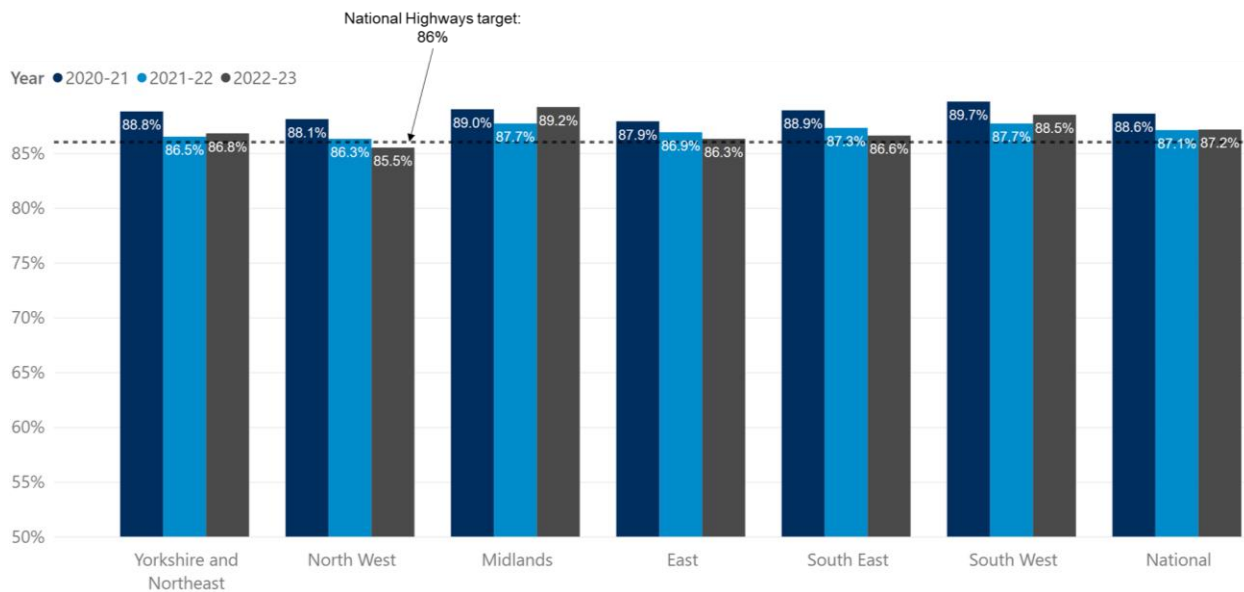

Figure 14 KPI 2.3 Incident clearance rate (y-axis starts at 50% so that the differences are easier to see)

3.3   Performance Indicators

Roadworks delay – PI 2.5

3.3.0   This metric measures the total additional delay during roadworks, compared to an average benchmark journey time measured before the roadworks were in place (in minutes per hour) and is shown on Figure 15.

3.3.1   Nationally, there has been a steady increase in delay minutes since 2020-21, from 0.9 minutes (2020-21) to 1.3 minutes (2022-23).

3.3.2   There appears to be a similar trend in all regions except South West and South East which show steady improvement in delay minutes. The North West region reports nearly double the delay compared to the national average.
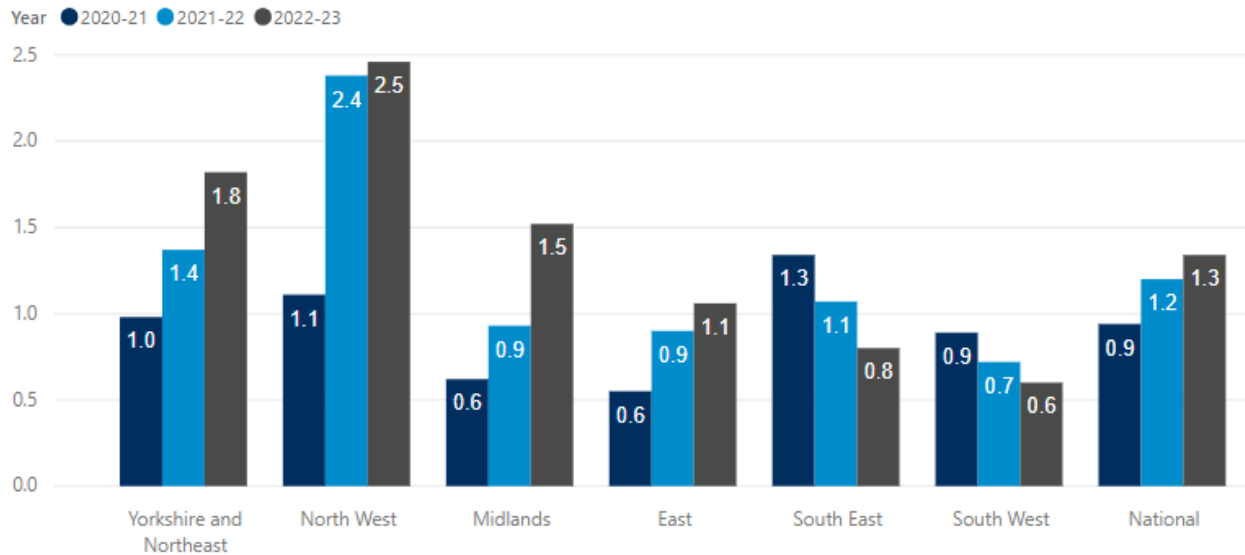
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Year ● 2020-21 ● 2021-22 ● 2022-23

Figure 15 PI 2.5 Delay from roadworks in minutes per hour travelled (totals rounded to one decimal place)

Journey time reliability – PI 2.6

3.3.3 Journey time reliability is a measure of observed travel time minus profile travel time and is shown on Figure 16.

3.3.4 Nationally, there has been a decline in journey time reliability from 1.9 seconds per vehicle per mile (spvpm) in 2020-21 to 2.9 spvpm in 2022-23.

3.3.5 There has been continued decline in journey time reliability in most regions (other than most recently in the South West).

Year ● 2020-21 ● 2021-22 ● 2022-23
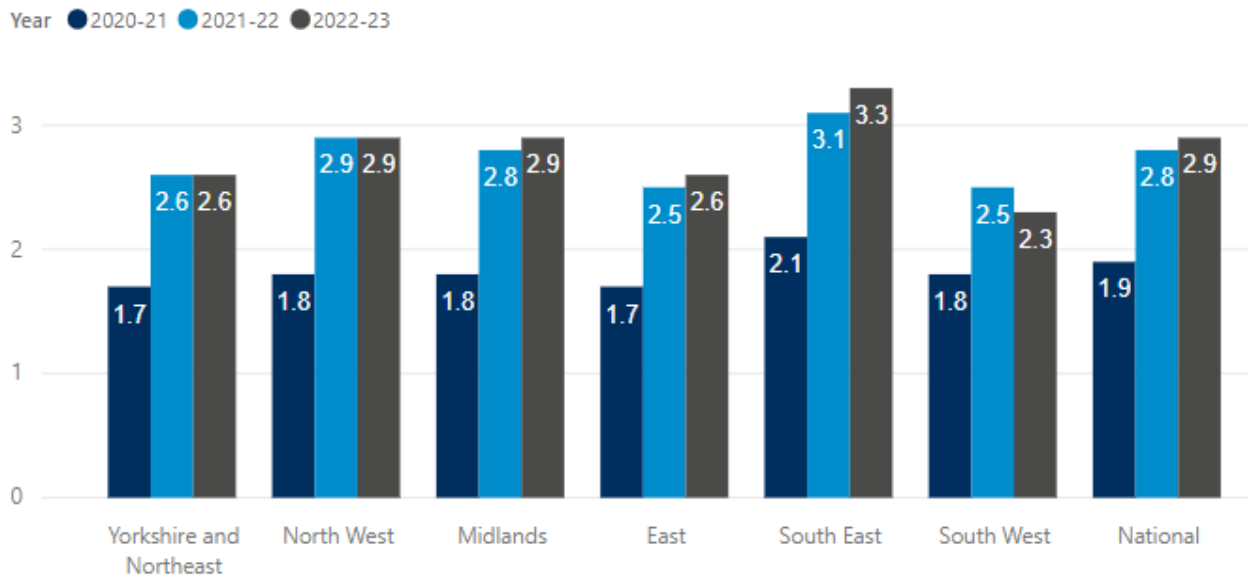
Figure 16 PI 2.6 Journey time reliability in seconds per vehicle per mile (spvpm)

Average speed – PI 2.8

3.3.6 The average speed across the network has shown steady decrease from 60.7mph in 2020-21 to 57.9mph in 2022-23.

3.3.7 This generally correlates with the overall national increase in roadworks delay (noted in Figure 15), other than in South East and South West where roadworks delays has improved but average speed has not been impacted. It may be an indicator of congestion / high traffic density in these regions post the effects of COVID.

3.3.8   Regionally, there has been a decline in average speed across all regions. The lowest average speed is in the Midlands (57.1mph) and the highest in the South West (59.7mph).
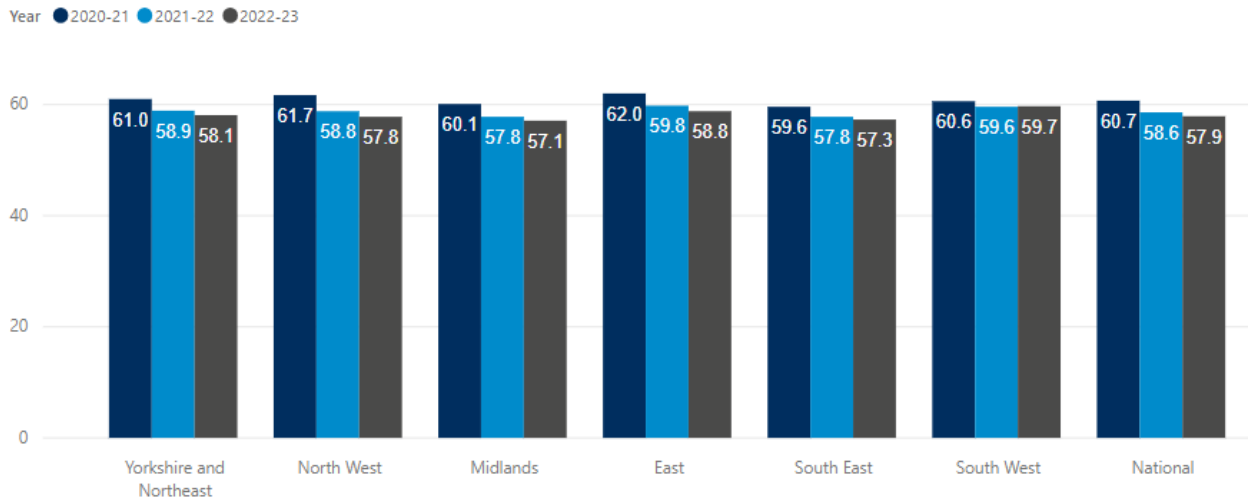

Figure 17 PI 2.8 Average speed in miles per hour

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4 PS3 - A Well Maintained and Resilient Network

4.1 Overview

4.1.0 Maintaining a safe and resilient road network is a key outcome area for National Highways. There is one KPI in this outcome area focussing on pavement condition, and four performance indicators. These are detailed in Table 3.

Table 3:Overview of Well Maintained and Resilient Network metrics

Type	Description of Metric	Method / unit of measurement
Key Performance Indicator 3.1	Pavement condition - pavement asset that does not require further investigation for possible maintenance	Percentage (%)
Performance Indicator 3.2a	Structures condition – average condition score for structural elements across the SRN	Number
Performance Indicator 3.2b	Structures condition – critical condition based on the lowest condition score of any structural elements deemed as critical	Number
Performance Indicator 3.4	Drainage resilience - length of carriageway with no observed significant susceptibility to flooding	Percentage (%)
Performance Indicator 3.5	Geotechnical condition - length of geotechnical asset in good condition	Percentage (%)

4.2 Key Performance Indicators

Pavement condition – KPI 3.1

4.2.0 During the first two years of RP2 we met our target of having 95% of our network assets requiring no further investigation. During 2022-23 the methodology was updated to take account of the pavement condition across all lanes, and the target was revised accordingly to 96.2%. We have continued to achieve our target.

4.2.1 Most regions are above the national target level with two exceptions; the Midlands and the East regions.

4.2.2 The Midlands (95.6% in 2022-23) has steadily increased its performance in RP2. The East region (93.6% in 2022-23) has a higher percentage of concrete roads, which has impacted its performance. It has had a slightly lower average score of 93% over the last three years.
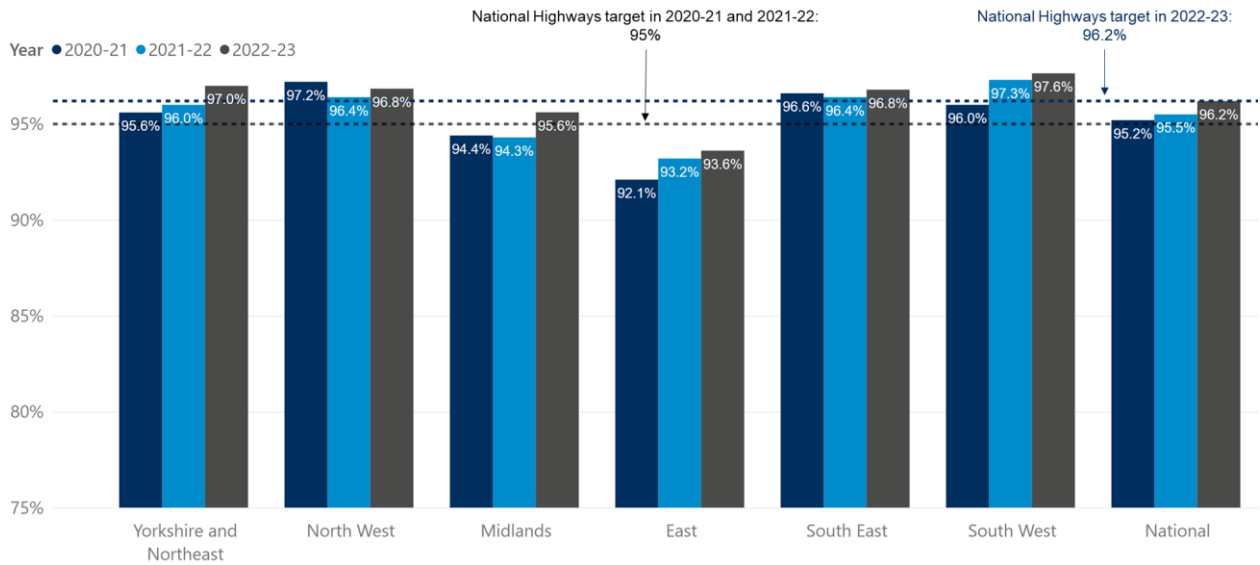
Figure 18 KPI 3.1 Pavement condition (y axis starts at 50% to make the smaller differences easier to see)

4.3　Performance Indicators

Structures condition – average (SCav) PI 3.2a

4.3.0　The average structure condition scores (Figure19) have been consistent throughout RP2 with the national average between 85.3% and 85.4%. This consistency has been achieved even though there has been an increase (by 8% since start of RP2) in the total number of structures in National Highways, predominately driven by service crossing/other structures and masts recorded on our systems.

4.3.1　The regional scores also remain steady in RP2, with little variation between scores for the different regions. The biggest year-on-year change was a 2% increase in the Midlands in 2021-22
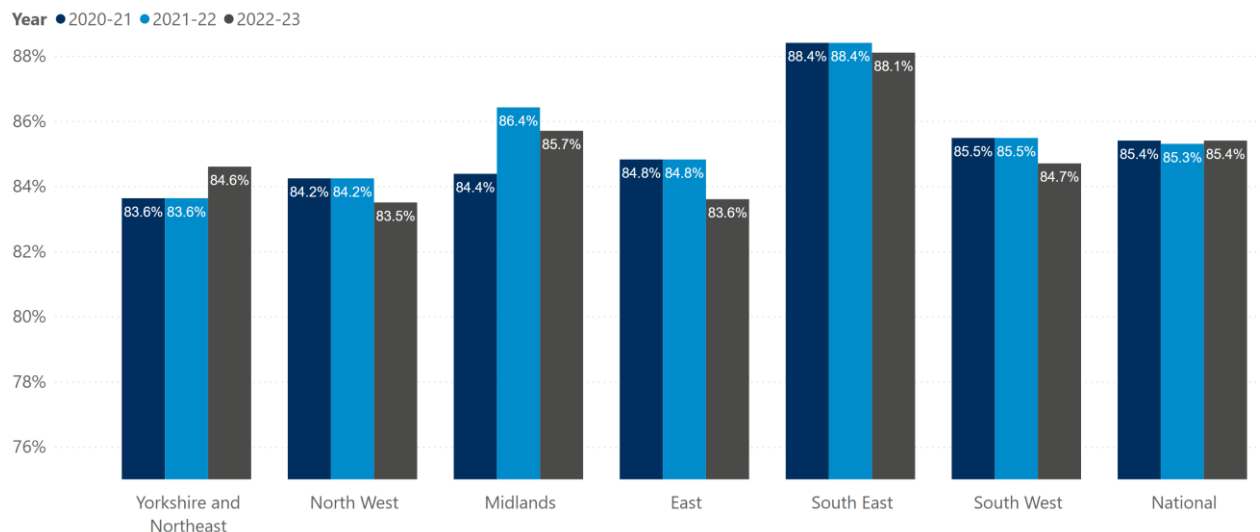

Figure 19 PI 3.2a Structures condition - average structure condition (y axis starts at 50% to make the smaller differences easier to see)

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Structures condition – critical (SCrit) – PI 3.2b

4.3.2   There has been a marginal improvement in the critical structural elements condition (0.2%) over the past 12 months, which builds on last year's increase of 0.2%. Overall, these are consistent with the aim of maintaining 'steady state' for the assets.

4.3.3   Similar to the average structure condition PI, the South East region have the highest performance score for condition of critical structural elements, scoring 71%, which is 7% higher than the national average.

4.3.4   The regional scores show very little deviation over the three years with some exceptions. The critical structure condition score has steadily increased by 1% or 2% year-on-year in the Midlands, whereas in the South West the score increased from 59% to 61% in 2021-22 but returned to 59% in 2022-23.
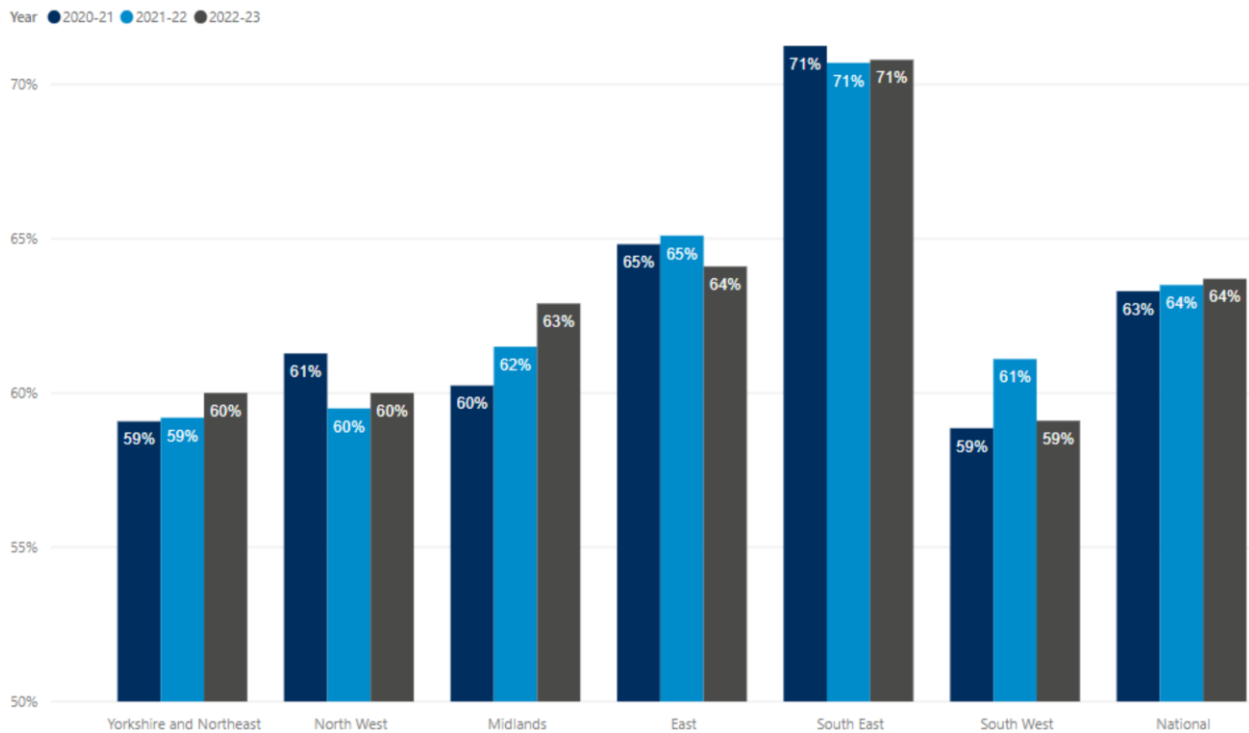

Figure 20 PI 3.2b Structures condition - critical structure condition based on the lowest condition score of structural elements deemed as critical (y axis starts at 50% to make the smaller differences easier to see)

Drainage resilience – PI 3.4

4.3.5   The average national drainage resilience score shows that for 2022-23, 68% of the carriageway (catchment length) does not have an observed significant susceptibility to flooding. This is a slight decrease of 3% from 2021-22. However, this does not mean that 32% of the network is at high risk of flooding, but that 32% of the network has catchments that include high risk flood hotspots.

4.3.6   Regions have been affected differently by changing weather conditions over the past 12 months and there has been a decline in performance in some regions. The South West was the region with the greatest flood risk (a 13% decrease), whereas the North West region saw a slight improvement over the past year. Despite these decreases, the national average only fell by 3%.

4.3.7   Prior to this, for 2020-21 and 2021-22, there were marginal changes in performance.
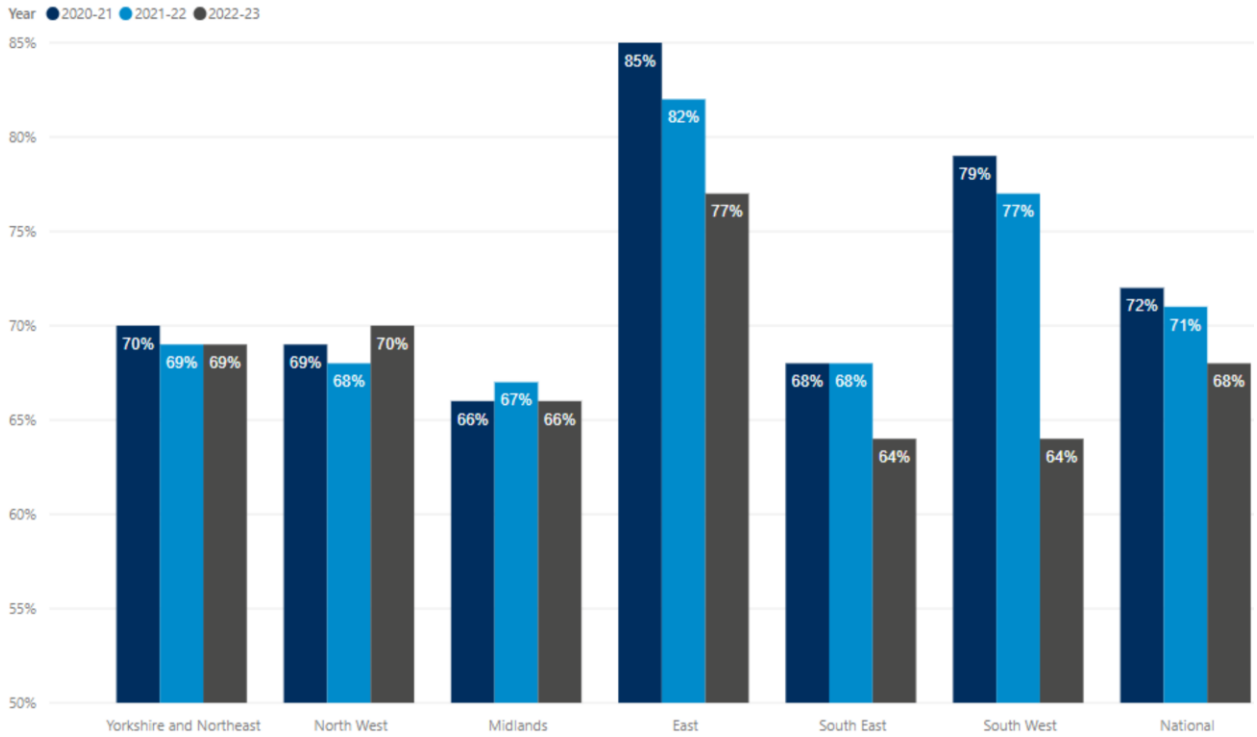
Figure 21 PI 3.4 Drainage resilience - The percentage length of carriageway that does not have an observed significant susceptibility to flooding. (y axis starts at 50% to make the smaller differences easier to see) significant susceptibility to flooding

Geotechnical condition – PI 3.5

4.3.8   The geotechnical condition score considers the ability of assets to perform their function at the time of inspection. The national average for the percentage length of geotechnical assets in good condition is 99.7% for 2022-23. This is broadly consistent with previous years. There is very little regional variation for this metric.

Figure 22 PI 3.5 Geotechnical condition

Annual Benchmarking Report

5 PS4 - Delivering Better Environmental Outcomes

5.1 Overview

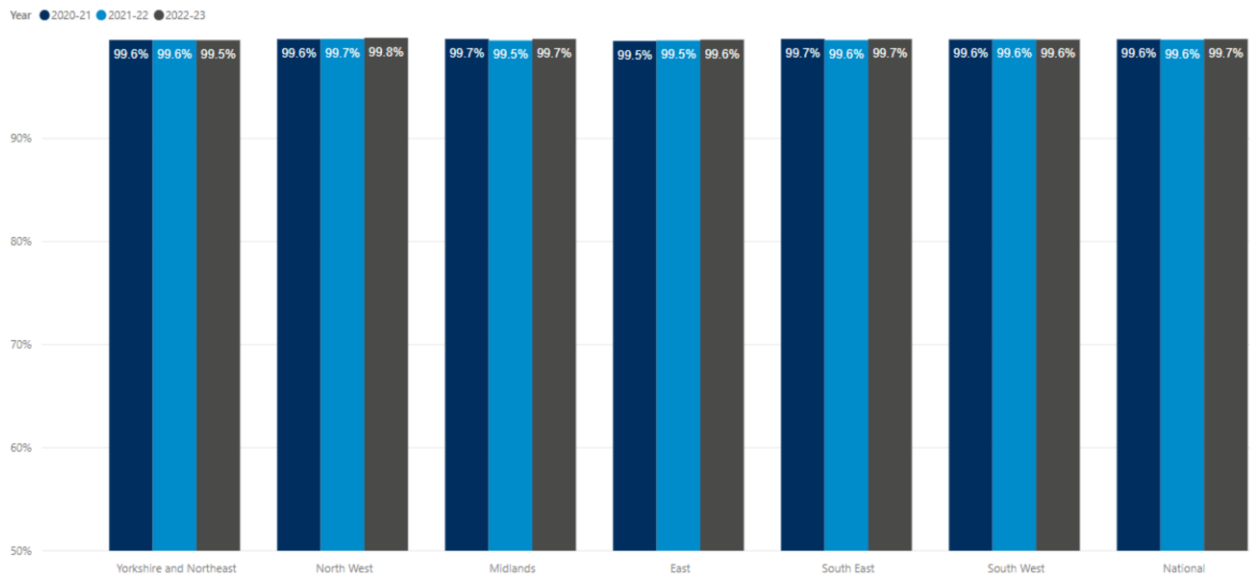5.1.0 Our environmental commitments include delivering noise mitigation, improving air quality, reducing corporate carbon and delivering no net loss for biodiversity. There are four KPIs in this outcome area and four PIs. Information that is available to be reported regionally, as listed in Table 4.

Table 4: Overview of Environment metrics

Type	Description of Metric	Method/ unit of measurement
Key Performance Indicator 4.1	Number of households within mitigated Noise Important Areas where noise has been reduced by National Highways	Number
Key Performance Indicator 4.2	Air Quality - The number of strategic road network links in exceedance of the legal nitrogen dioxide (NO2) limits as set by the European Union and accepted by the government.	Number
Performance Indicator 4.5	Supply Chain Carbon - The carbon footprint associated with National Highway's supply chain and also normalised by the volume of work undertaken.	Tonnes/CO_2e
Performance Indicator 4.7	Water Quality - The length of watercourse enhanced through the mitigation of medium, high, and very high-risk outfalls as well as through other enhancements.	Kilometres (km)

5.2 Key Performance Indicators

Noise – KPI 4.1

5.2.0 We have a target to mitigate noise pollution for 7,500 households within the identified Noise Important Areas (NIAs) by the end of 2024-25. As of 2022-23, we have mitigated the noise levels experienced by 4,163 households.

5.2.1 The number of households mitigated is a factor of planned activities which varies by region. In 2020-21 National Highways delivered noise solutions for 2,111 households. This was largely driven by the 1,528 households which were mitigated in the North West. In 2022-23, we continued to make progress towards achieving the overall KPI target, with a further 985 households mitigated. A large proportion of these (45%) were also in the North West.

5.2.2 Variation between different regions is normal for a measure which is driven by pre-planned interventions.

5.2.3 By the end of 2022-23 we have delivered 55.5% of our 2024-25 target and we remain on track to achieve the national target at the end of the road period.
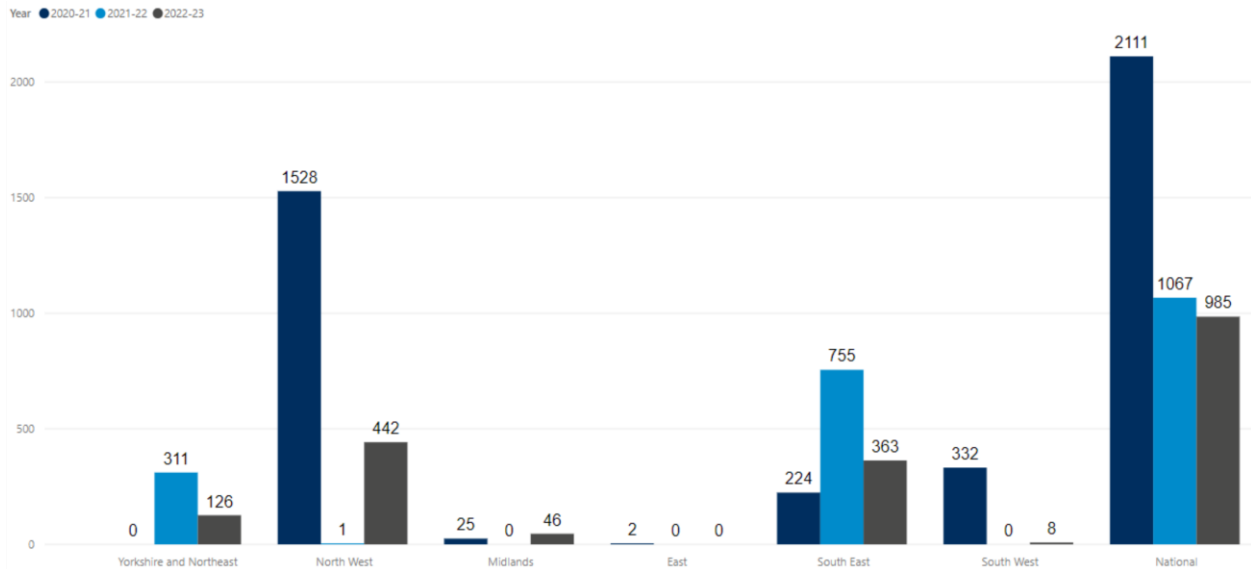
Figure 23 KPI 4.1 Noise - number of households where noise levels have been reduced as a result of National Highways schemes in the region

Air Quality – KPI 4.3

5.2.4   We have a target to bring links agreed with the department and based on the Pollution Climate Mapping model into compliance with legal NO2 limits in the shortest timescales possible.

5.2.5   The number of links where air quality exceeded the legal NO_2 limit were identified remained at 31 in 2020-21 and 2021-22. For 2022-23 following further assessments completion there were 43 identified links which exceeded the NO_2 limit. The greatest increase was in the North West (from 2 to 10).

5.2.6   As part of the assessment process, each link is reviewed annually, and the findings reported in the Annual Evaluation Report[7].

5.2.7   In summer 2022, we deployed new air quality monitoring sites alongside 56 sections of our network, which corresponded to those sections of the network that were assessed to be above the annual mean NO_2 legal limit value, as well as those parts of the network within 10% of legal limit value. This new monitoring data will form part of the evidence presented in next year's Annual Evaluation Report on limit value compliance status.

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[7] National Highways, Air Quality on England's Strategic Road Network: Annual Evaluation Report 2021, Analysis of Potential Non-Compliance with Limit Values for Nitrogen Dioxide, Dec 2022. Available at: https://s3.eu-west-2.amazonaws.com/assets.nationalhighways.co.uk/Air+quality+progress+update/Index/Annual+Evaluation+Report+2021/CCS1022013620-001_Air+quality+report+for+Highways+2022+(1).pdf

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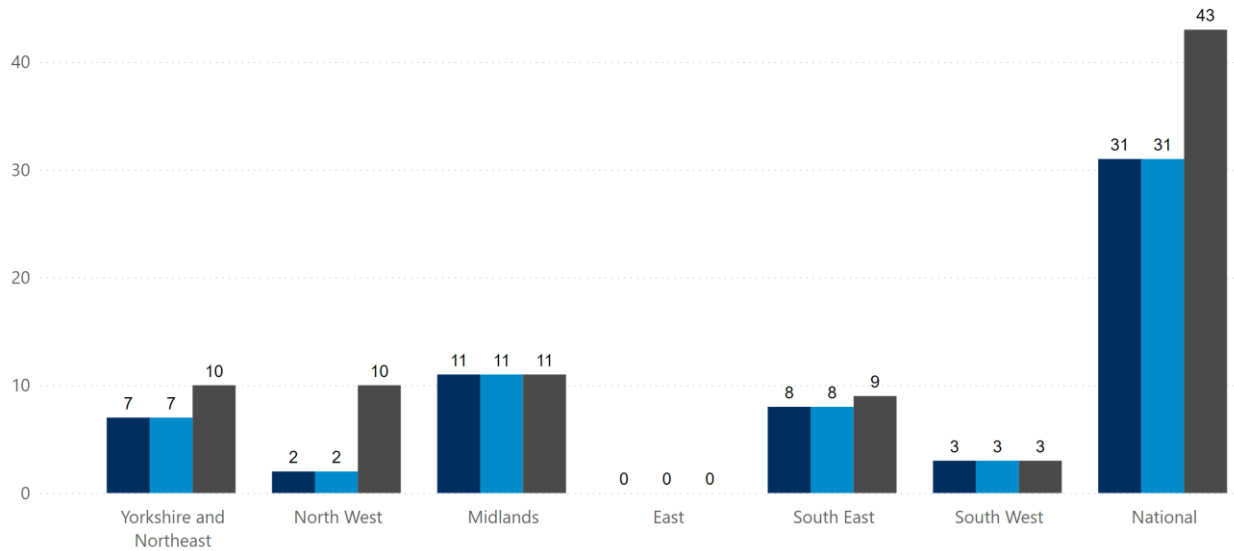
Year ● 2020-21 ● 2021-22 ● 2022-23

Figure 24 KPI 4.3 Air quality - number of links on the SRN that exceed the legal NO$_2$ limit set by the EU for each region.

5.3   Performance Indicators

Supply chain carbon emissions – PI 4.5

5.3.0   This performance indicator provides a picture of the carbon footprint associated with National Highway's supply chain and is normalised by the volume of work undertaken and the investment activity.   It is a new measure for RP2, therefore regional performance data is only available for the last two years.

5.3.1   Nationally, the supply chain carbon footprint has increased by 60,672 tonnes/CO$_2$e in the last year, to 346,910 tonnes/CO$_2$e.

5.3.2   The supply chain carbon emissions in the East have approximately halved from 2021-22 and emissions have reduced by nearly 17,000 tonnes/CO$_2$e in the South East. The carbon emissions in the Midlands have seen a slight reduction in 2022-23; however, the northern regions and the South West have all had a rise in carbon emissions this year.

5.3.3   We continue to work closely with the supply chain to increase compliance with carbon reporting, with steps in place to drive improvement for 2023-24.

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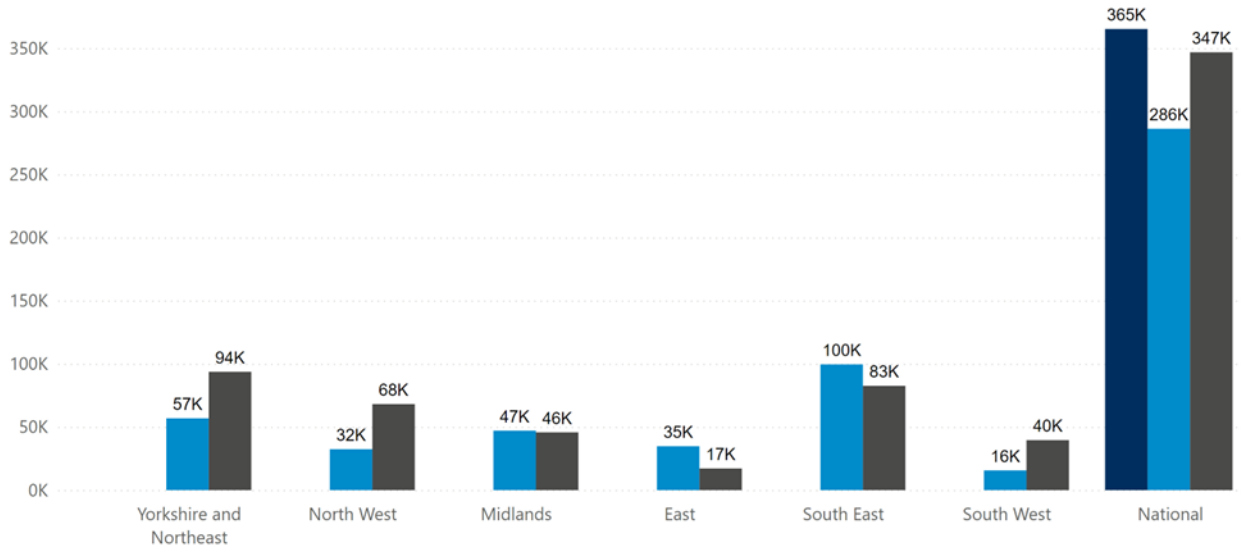
Figure 25 PI 4.5 Supply chain carbon emissions (normalised by the volume of work undertaken (tonnes/CO_2e))

Water quality – PI 4.7

5.3.1 During 2022-23, 6.3km of watercourse were enhanced. This total is a factor of planned activity, which varies by region. Although this is comparatively less than previous years, it exceeds our original forecast of 3.5km for 2022-23.

5.3.2 In 2020-21, the East received targeted watercourse enhancement efforts, accounting for 74.1% of the national total. Similarly, in 2021-22, the South West improvements accounted for 73.3% of the national total. In 2022-23, the activity has been more distributed among the regions.

Figure 26 KPI 4.7 Water quality - length of enhanced watercourse (km)

Annual Benchmarking Report

6 PS5 – Meeting the needs of all road users

6.1 Overview

6.1.0 This outcome area builds on our commitment to put customers at the centre of our decision making and includes measures about customer satisfaction and user experience, as shown in Table 5.
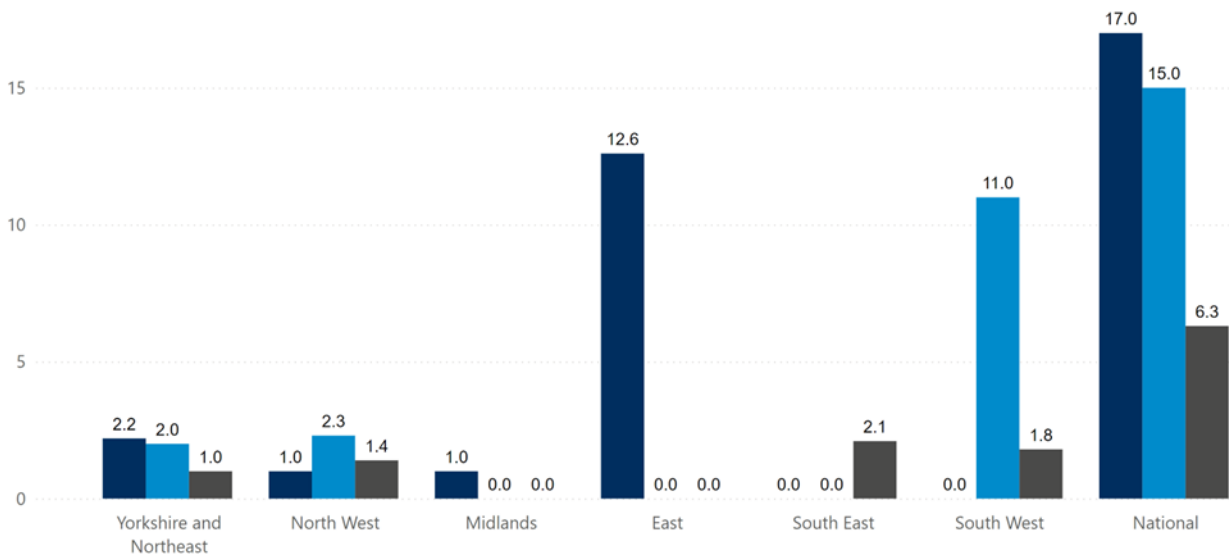
Table 5: Overview of meeting the needs of all road users metrics

Type	Description of Metric	Method/ unit of measurement
Key Performance Indicator 5.1	Road user satisfaction - % of Strategic Roads User Survey responders who were satisfied with their journey on the SRN	Percentage (%)
Key Performance Indicator 5.2	Roadworks information timeliness and accuracy – overnight road closures accurately (+/- 1 hr) notified 7 days in advance.	Percentage (%)
Performance Indicator 5.3	Timeliness of information provided to road users through electric signage - average median time to set signs and signals on all motorways after notification	Minutes
Performance Indicator 5.4	Ride Quality - percentage of the network (as defined by HAPMS, excluding DBFOs) where 3m ELPV is deemed to be category 2 and better, in accordance with the road condition standard, HD29.	Percentage (%)
Performance Indicator 5.5	Reviewed diversion routes – percentage of local highways authorities engaged with to review diversions for unplanned events	Percentage (%)

6.2 Key Performance Indicators

Road user satisfaction - KPI 5,1

6.2.0 Transport Focus administers the Strategic Roads User Survey (SRUS) to measure the experience of drivers who use the SRN[8]. Due to target setting and sample calibration, during the face-to-face survey transition to a web-based survey as a result of Covid-19, there was not target for 2022-23 and therefore we have no reported regional disaggregation. The revised survey will have a target for 2023-24.

Roadworks information timeliness and accuracy – KPI 5.2

6.2.1 The target for this area is to achieve 90% accuracy of information rolling seven days in advance of works by end of 2024-25. Performance has improved nationally year on year from 54.5% in 2020-21 to 68.1% in 2021-22 and 70.0% in 2022-23.

6.2.2 While there has been an improvement in the national average of 1.9% in 2022-23, this is not consistent across all regions. Both the Midlands and South East have lower performance in 2022-23 than in the previous year.

6.2.3 To achieve National Highways' target of 90% in 2024-25, year-on-year improvements need to continue. In particular, we will increase focus on the late

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cancellation of works where we can foresee closures that are unlikely to go ahead, more than seven days in advance.
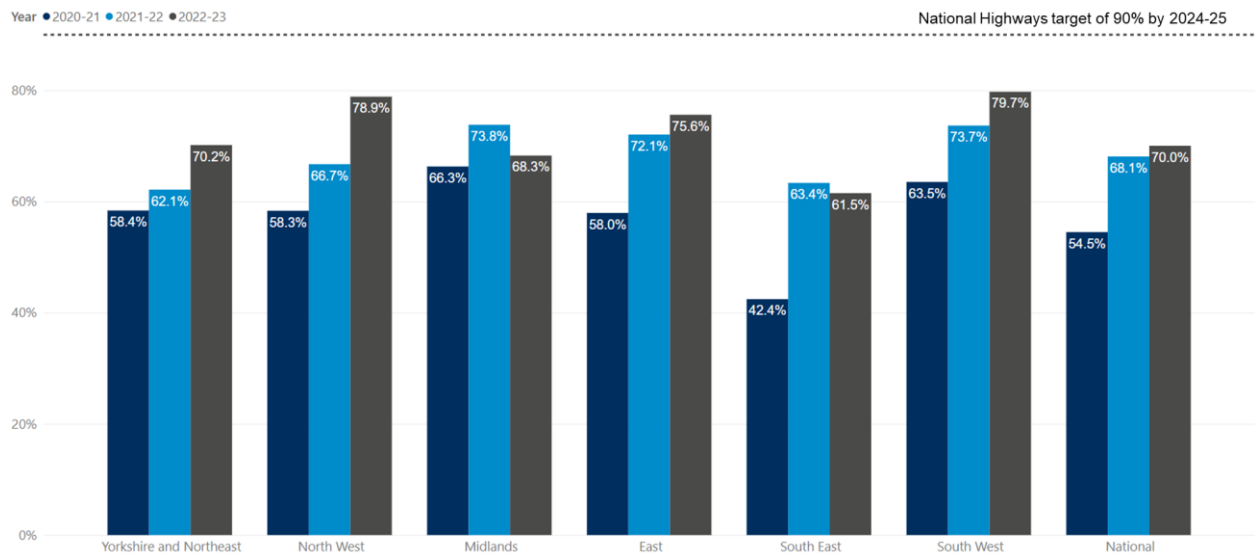

Figure 27 KPI 5.2 Roadworks information timeliness and accuracy

6.3   Performance Indicators

Timeliness of information provided to road users through electronic signage – PI 5.3

6.3.0   The performance indicator reports on the average median time to set signs and signals on all motorways after notification of an incident, that requires signs and signals to be set manually. time

6.3.1   Nationally, the average median time taken to set electronic signage following an incident has increased from 1 minute 53 seconds in 2020-21 to 2 minutes 20 seconds in 2022-23.

6.3.2   The response time varies across the six regions. The South East has experienced a steady improvement each year from 2021-22, whereas the other regions have shown a higher variation for their year-on-year differences.

6.3.3   All regions were achieving the response time below 3 minutes at the end of 2022-23. The North West and the Midlands have experienced a large increase in 2022-23 (40 seconds in the North West and 50 seconds in the Midlands).

6.3.4   Yorkshire and North East has seen a significant improvement in response time in 2022-23 reducing by 35 seconds.

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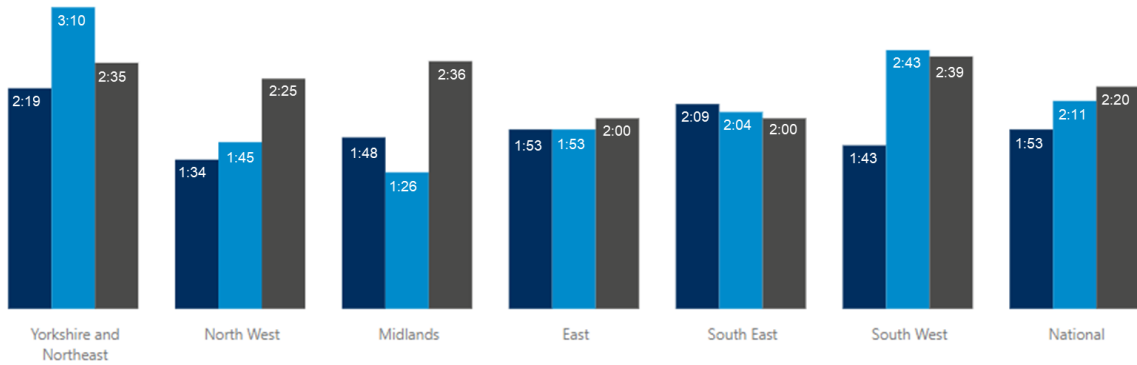
Year ● 2020-21 ● 2021-22 ● 2022-23

Figure 28 PI 5.3 Timeliness of information provided to road users through electronic signage (in minutes and seconds)

Ride quality – PI 5.4

6.3.5   This performance indicator reports the ride quality for the strategic road network using a subset of the pavement condition metric condition parameters. It is represented by the percentage of pavement asset delivering ride quality consistent with the 3m Enhanced Longitudinal Profile Variance (ELPV) value based on engineering factors and driver comfort.

6.3.6   Ride quality performance is very consistent across all the regions and years, with the national average only varying by 0.2% in RP2.

6.3.7   The lowest recorded performance was 97.5% in the Midlands in 2021-22 which improved to 98.2% in the next year.

6.3.8   The biggest percentage difference observed was in Yorkshire and Northeast where the ride quality dropped by 1.1% in 2021-22 and then increased by 1.0% in 2022-23.

Year ● 2020-21 ● 2021-22 ● 2022-23
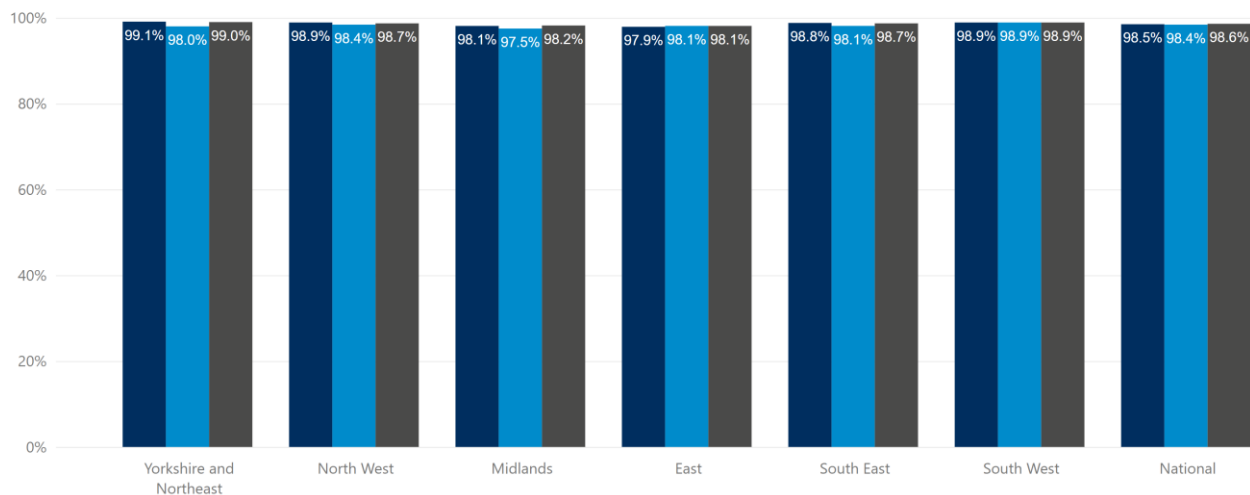
Figure 29 PI 5.4 Ride quality

Working with local highways authorities to review diversion routes for unplanned events – PI 5.5

6.3.0   This measure reports on the percentage of local highway authorities which National Highways engaged with, to review diversion routes for unplanned events.

Annual Benchmarking Report

6.3.1　As a company, we have made significant improvements in engaging with local highways authorities. We have engaged with 92 local highways authorities in England and Wales.

6.3.2　Over the past year all regions achieved 100% engagement, with the exception of the South West where engagement with one local highways authority was not achievable.
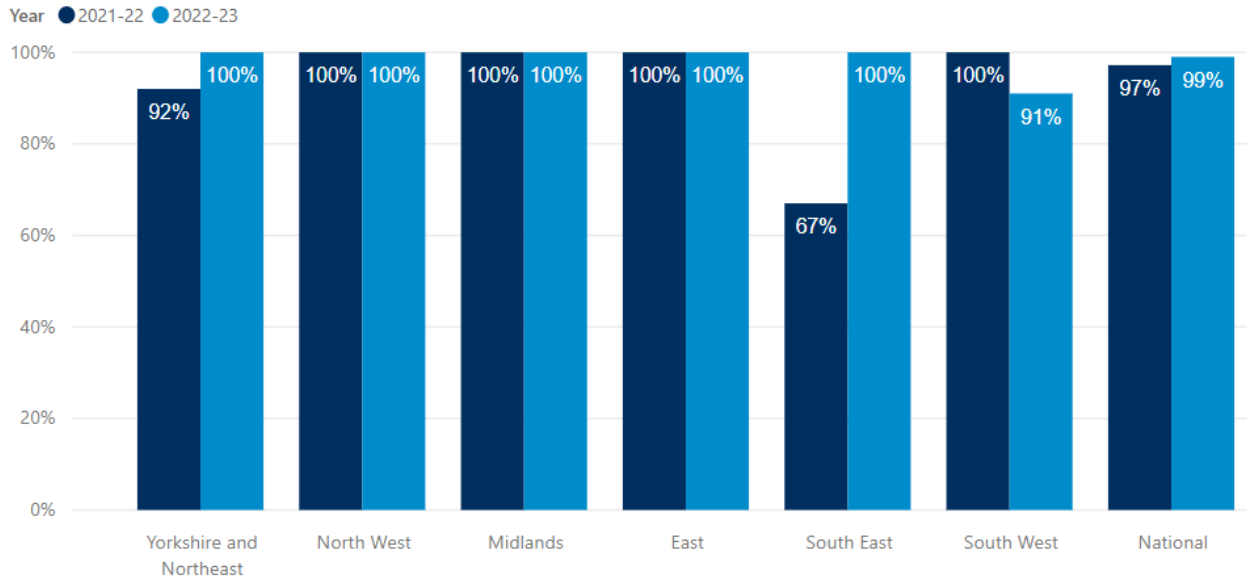

Figure 30 PI 5.5 Working with local highways authorities to review diversion routes for unplanned events

7   Conclusion

7.1.0   The production of this first annual benchmarking report has enabled us to share regional performance information for most of the KPIs and PIs. It has enabled National Highways to explain variations in regional performance recognising that all regions are different, with differing topography, size of network, variation in road types and traffic volumes and type. We will continue to build on this information and insight in future reports.

7.1.1   One of the key benefits of presenting a benchmarking report is the opportunity to review data against previous years and across the different regions, as well as understanding dependencies and links between indicators. For this 2022-23 report, visibility of trends in data is an important first step.

7.1.2   Future reports will explain how planned initiatives have impacted regional performance, facilitated cross regional learning and enabled internal challenge.

7.1.3   In addition, data from other sources may be utilised in future reports as comparators for future benchmarking, including (where available):

- Relevant local authority data;
- Relevant international data;
- Corporate reporting in relation to government target reporting; and
- Other data from corporate bodies.

Annual Benchmarking Report

8 Annex A - National Highways 2022-23 Disaggregated Regional Performance

National Highways Regional Disaggregation of performance year-end 2022-23

Improving safety for all

Performance specification

KPI

The number of people killed or seriously injured on the SRN

Ongoing reduction in the number of people killed or seriously injured on the SRN as reported in STATS19 to support a decrease of at least 50% by the end of 2025 against the 2005-09 average baseline. A +/- variance of 5% each year has been agreed with DfT Road User Safety Division to support this target.

Regions	2019	2020	2021
East	325	241	289
South East	540	413	480
South West	196	131	208
Midlands	349	219	371
North West	215	156	268
Yorkshire and Northeast	323	126	348
National	1948	1288	1857

PIs

Total number of people killed or injured on the SRN

Illustrate the impact of activities undertaken by the company, and the influence of external factors with regards to making the network safer.

Regions	2019	2020	2021
East	2026	1284	1457
South East	3919	2598	3016
South West	1250	766	1013
Midlands	1915	1316	1743
North West	1590	944	1268
Yorkshire and Northeast	1647	965	1322
National	12347	7873	9819

The number of non-motorised and motorcyclist users killed or injured on the SRN.

The total number of pedestrian, pedal cyclist, motorcyclist and equestrian casualties on the SRN. Disaggregation will be provided by road user group to assist understanding of the PI but are not considered PIs in their own right.

Regions	2019	2020	2021
East	128	91	142
South East	333	196	252
South West	113	84	112
Midlands	192	103	156
North West	70	57	68
Yorkshire and Northeast	115	74	73
National	962	605	803

Number of injury collisions on the SRN

The total number of collisions recorded that resulted in at least one injury (of any severity) on the SRN.

Regions	2019	2020	2021
East	1259	833	940
South East	2591	1785	2043
South West	782	516	672
Midlands	1312	910	1237
North West	935	605	798
Yorkshire and Northeast	1026	636	849
National	7905	5287	6539

The accident frequency rate for National Highways staff

The accident frequency rate for National Highways staff based on Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) incidents and normalised by the number of hours worked in a year.

Regions	2020-21	2021-22	2022-23
East	0.11	0.00	0.00
South East	0.06	0.05	0.00
South West	0.00	0.06	0.06
Midlands	0.05	0.13	0.02
North West	0.00	0.14	0.00
Yorkshire and Northeast	0.06	0.06	0.10
National	0.05	0.05	0.03

The accident frequency rate for National Highways supply chain staff

The accident frequency rate for National Highways supply chain staff based on Reporting of Injuries Diseases and Dangerous Occurrences Regulations (RIDDOR) incidents and normalised by the number of hours worked in a year.

Regions	2020-21	2021-22	2022-23
East	0.00	0.06	0.06
South East	0.07	0.05	0.12
South West	0.14	0.11	0.03
Midlands	0.03	0.03	0.06
North West	0.07	0.14	0.05
Yorkshire and Northeast	0.00	0.05	0.09
National	0.05	0.07	0.06

Annual Benchmarking Report

National Highways Regional Disaggregation of performance year-end 2022-23

Providing fast and reliable journeys

Performance specification

KPI

Average Delay

Average delay to road users calculated as the difference between the observed travel time and the speed limit travel time.

Regions	2020-21	Actual	2022-23
East	8.0	8.1	9.1
Midlands	8.9	9.2	10.1
North West	8.0	8.8	9.8
South East	7.9	9.8	10.3
South West	8.2	7.2	7.0
Yorkshire and Northeast	8.2	8.3	9.2
National	8.7	8.8	9.5

Road Network Impact

Roadworks Network Impact (RNI) is a new indicator of Traffic Management restrictions by length and duration

Regions	2020-21	2021-22	2022-23
East		8.9M	7M
Midlands		9.5M	12.2M
North West	N/A	8.9M	8.3M
South East		10.3M	9.3M
South West		3.3M	2.5M
Yorkshire and Northeast		5.8M	5.1M
National	60.7	58.6	
National		42.7M	42.3M

Incident clearance rate
The percentage of incidents on the motorway that impact traffic flow but are cleared in less than one hour.

Regions	2020-21	2021-22	2022-23
East	88.78% 87.9%	88.7% 88.9%	88.3%
South East	91.99% 88.9%	88.4% 87.3%	88.8%
South West	92.80% 89.7%	88.97% 87.7%	88.5%
Midlands	90.15% 89.0%	87.88% 87.7%	89.2%
North West	88.80% 88.1%	88.43% 86.3%	85.5%
North East	90.48% 88.8%	86.88% 86.4%	88.8%
National	88.8%	87.1%	87.2%

Pts

Delay from roadworks
This metric measures the additional journey time during roadworks for all vehicle types, compared to an average benchmark journey time measured before the roadworks were in place. Calculated as average annual delay (minutes per hour travelled).

Regions	2020-21	2021-22	2022-23
East	0.55	0.9	1.06
Midlands	0.82	0.93	1.52
North West	1.11	2.38	2.48
South East	1.34	1.07	0.80
South West	0.89	0.72	0.80
Yorkshire and Northeast	0.98	1.37	1.82
National	0.94	1.20	1.34

Journey time reliability

The average difference between the observed travel time and the profile (typical) travel time (secs)

Regions	2020-21	2021-22	2022-23
East	1.7	2.5	2.8
Midlands	1.8	2.8	2.9
North West	1.8	2.9	2.9
South East	2.1	3.1	3.3
South West	1.8	2.5	2.3
Yorkshire and Northeast	1.7	2.8	2.8
National	1.9	2.8	2.9

Average speed
The average speed of vehicles travelling on the strategic road network (mph)

Regions	2020-21	2021-22	2022-23
East	62.0	59.8	58.8
Midlands	60.1	57.8	57.1
North West	61.7	58.8	57.8
South East	59.6	57.8	57.3
South West	60.6	59.6	59.7
Yorkshire and Northeast	61.0	58.9	58.1
National	60.7	58.6	57.9

National Highways Regional Disaggregation of performance year-end 2022-23

A well maintained and resilient network

Performance specification

KPIs

Pavement condition

The percentage of pavement asset that does not require further investigation for possible maintenance. This measure reports on the overall strategic road network condition as a result of deterioration of the pavement network due to time and traffic and restoration of condition from the annual investment in maintenance.

Regions	2020-21	2021-22	2022-23
East	92.10%	93.20%	93.61%
South East	96.60%	96.40%	96.79%
South West	96.00%	97.30%	97.64%
Midlands	94.40%	94.30%	95.61%
North West	97.20%	96.40%	96.84%
Yorkshire and Northeast	95.60%	96.00%	96.99%
National	95.20%	95.50%	96.20%

PIs

Structures condition

The condition of National Highways structures across the strategic road network (SCI) (SCav) and (SCrit)

Regions	(SCav / SCrit) 2020-21		(SCav / SCrit) 2021-22		(SCI /SCav / SCrit) 2022-23		
East	84.82%	64.82%	84.82%	65.10%	78.2%	83.6%	64.1%
South East	88.40%	71.25%	88.40%	70.70%	78.9%	88.1%	70.8%
South West	85.48%	58.86%	85.48%	61.10 %	76.1%	84.7%	59.1%
Midlands	84.38%	60.24%	86.42%	61.50%	87.4%	85.7%	62.9%
North West	84.24%	61.28%	84.24%	59.50%	82.5%	83.5%	60.0%
Yorkshire and Northeast	83.63%	59.08%	83.63%	59.20%	80.6%	84.6%	60.0%
National	85.4%	63.3%	85.3%	63.5%	81.4%	85.4%	63.7%

Drainage resilience

The percentage length of carriageway that does not have an observed significant susceptibility to flooding

Regions	2020-21	2021-22	2022-23
East	85%	82%	77%
South East	68%	68%	64%
South West	79%	77%	64%
Midlands	66%	67%	66%
North West	69%	68%	70%
Yorkshire and Northeast	70%	69%	69%
National	72%	71%	69%

Geotechnical condition

The percentage length of the National Highways geotechnical asset that is in good condition based on the ability of the asset to perform its function at the time of inspection (i.e. to support other highways assets).

Regions	2020-21	2021-22	2022-23
East	99.46%	99.62% 99.51%*	99.59%
South East	99.66%	99.55%	99.65%
South West	99.61%	99.65% 99.62%*	99.60%
Midlands	99.66%	99.51%	99.66%
North West	99.64%	99.66%	99.77%
Yorkshire and Northeast	99.56%	99.56%	99.54%
National	99.62%	99.59%	99.65%

*Denotes error in reporting from 2021-22 figures

National Highways Regional Disaggregation of performance year-end 2022-23

Delivering better environmental outcomes

Performance specification

KPIs

Noise

The number of households within mitigated Noise Important Areas where noise has been reduced through National Highways designated fund projects.

Regions	2020-21	2021-22	2022-23
East	2	0	0
South East	224	755	363
South West	332	0	8
Midlands	25	0	46
North West	1528	1	442
Yorkshire and Northeast	0	311	126
National	2111	1067	985

Air Quality

The number of strategic road network links in exceedance of the legal nitrogen dioxide (NO_2) limits as set by the European Union and accepted by the government. Bring links agreed with the department and based on the Pollution Climate Mapping model into compliance with legal NO_2 limits in the shortest timescales possible.

Regions	2020-21	2021-22	2022-23
East	0	0	0
South East	8	8	9
South West	3	3	3
Midlands	11	11	11
North West	2	2	10
Yorkshire and Northeast	7	7	10
National	31	31	43

Supply Chain Carbon Emissions

The carbon footprint associated with National Highway's supply chain and also normalised by the volume of work undertaken (tonnes/CO_2e)

Regions	2020-21	2021-22	2022-23
East	n/a	34714	17137
South East	n/a	99538	82609
South West	n/a	15609	39569
Midlands	n/a	47102	45759
North West	n/a	32402	68143
Yorkshire and Northeast	n/a	56873	93692
National	365353	286238	346910

Water Quality

The length of watercourse enhanced through the mitigation of medium, high, and very high risk outfalls as well as through other enhancements, for example river retraining/rewilding.

Regions	2020-21	2021-22	2022-23
East	12.6	0.0	0.0
South East	0.0	0.0	1.0
South West	0.0	11.0	1.8
Midlands	1.0	0.0	0.0
North West	1.0	2.3	1.4
Yorkshire and Northeast	2.2	2.0	2.5
National	17.0	15.0	6.7

National Highways Regional Disaggregation of performance year-end 2022-23

Meeting the needs of all road users

Performance specification

KPIs

Roadworks information timeliness and accuracy

The percentage of overnight road closures that are accurately notified by National Highways seven days in advance. A correctly notified road closure is one that commences within +/- 1 hour of the start time stated 7 days in advance on the Network Occupancy Management System (NOMS).

Regions	2020-21	2021-22	2022-23
East	58.0%	72.1%	75.6%
South East	42.4%	63.4%	61.5%
South West	63.5%	73.7%	79.7%
Midlands	66.3%	73.8%	68.3%
North West	58.3%	66.7%	78.9%
Yorkshire and Northeast	58.4%	62.1%	70.2%
National	54.5%	68.1%	70.0%

Timeliness of information provided to road users through electronic signage

The average median time to set signs and signals on all motorways after notification of an incident, that requires signs and signals to be set manually.

Regions	2020-21	2021-22	2022-23
East	01:53	01:53	02:00
South East	02:09	02:04	02:00
South West	01:43	02:43	02:39
Midlands	01:48	01:26	02:36
North West	01:34	01:45	02:25
Yorkshire and Northeast	02:19	03:10	02:35
National	01:53	02:11	02:20

Ride Quality

This measure reports the ride quality for the strategic road network using a subset of the pavement condition metric condition parameters. It is represented by the percentage of pavement asset delivering ride quality consistent with the 3m Enhanced Longitudinal Profile Variance (ELPV) value in Highways England's standards, which is based on engineering factors and driver comfort. Percentage of the network (as defined by HAPMS, excluding DBFOs) where 3m ELPV is deemed to be category 2 and better, in accordance with the road condition standard, HD29.

Regions	2020-21	2021-22	2022-23
East	97.9%	98.1%	98.1%
South East	98.8%	98.1%	98.7%
South West	98.9%	98.9%	98.9%
Midlands	98.1%	97.5%	98.2%
North West	98.9%	98.4%	98.7%
Yorkshire and Northeast	99.1%	98.0%	99.0%
National	98.5%	98.4%	98.6%

Working with local highways authorities to review diversion routes for unplanned events.

The percentage of local highway authorities which National Highways engaged with, to review diversion routes for unplanned events

Regions	2020-21	2021-22	2022-23
East	n/a	100%	100%
South East	n/a	67%	100%
South West	n/a	100%	91%
Midlands	n/a	100%	100%
North West	n/a	100%	100%
Yorkshire and Northeast	n/a	92%	100%
National		97.2%	99.0%

* Note weightings applied to different regions based on size of network, traffic flows and number of signs.

Annual Benchmarking Report

Yorkshire and Northeast

A 670-mile network of motorways and A roads sit at the heart of the transport network in Yorkshire and the North East.
From the city roads of Leeds and Newcastle, to rural single carriageways, we keep our region moving.
This region comprises Areas 12 and 14. Both of these areas have transitioned to Asset Delivery Contracts.
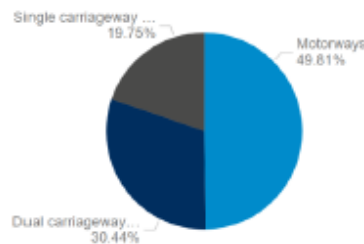
Road Information[4]

Lane kilometres
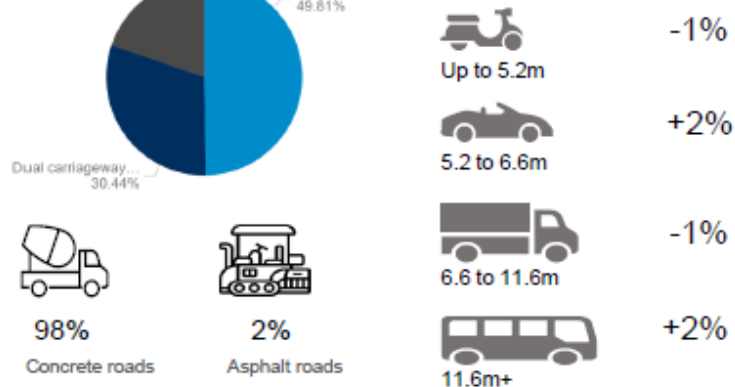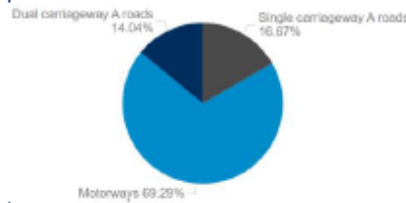
Road type: ● Motorways ● Dual carriageway A roads ● Single carriageway A roads

0K　0.2K　0.4K　0.6K　0.8K　1K　1.2K　1.4K　1.6K　1.8K　2K　2.2K　2.4K　2.6K

Regional Demographic

8.1m[1]
Population

£21,971[2]
GVA per head

Road type split

Single carriageway ... 19.75%

Motorways 49.81%

Dual carriageway... 30.44%

98%
Concrete roads

2%
Asphalt roads

Percentage difference in May 2023 traffic compared to May 2019[5]

Up to 5.2m	-1%
5.2 to 6.6m	+2%
6.6 to 11.6m	-1%
11.6m+	+2%

Regional Assets[3]

2,624 structures

Structure type split

Structure	Value
Bridge and large culvert	894
Mast	514
Sign/Signal Gantry	467
Small Span Structures	382
Retaining wall	323
Service Crossings and Other Structures	88
Road tunnel	0
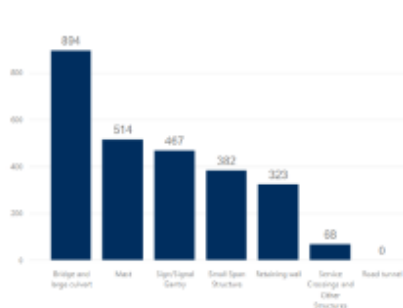
Schemes[5]

Scheme number	Scheme	Start of works	Open for traffic
1	A1 Scotswood to north Brunton	Started	Opened
2	A19 Testos	Started	Opened
3	A19 Norton to Wynyard	Started	Opened
4	M621 junctions 1 to 7	Started	2024-25 Q2
5	A61 Westwood roundabout	Started	Opened
6	A1 Morpeth to Ellingham	TBC	TBC
7	A1 Birtley to Coal House	Started	2024-25 Q4
8	A19 Down Hill Lane	Started	Opened
9	A63 Castle Street	Started	2024-25 Q4
10	M62 junctions 25 to 30 upgrade	Cancelled	Cancelled

North West

Our 530-mile network in the North West stretches from the city of Carlisle to the edges of the Peak District. It's one of the most diverse areas of motorways and major A-roads in the country to maintain and keep moving.

This region comprises Areas 10 and 13. Both of these areas have transitioned to Asset Delivery Contracts.

Regional Demographic

7.4m[1]
Population

£24,894[2]
GVA per head

Regional Assets[3]

3,005 structures

Structure type split

Road Information[4]

Lane kilometres

Road type: ● Motorways ● Dual carriageway A roads ● Single carriageway A roads

0K 0.2K 0.4K 0.6K 0.8K 1K 1.2K 1.4K 1.6K 1.8K 2K 2.2K 2.4K 2.6K

Road type split

Dual carriageway A roads 14.04%
Single carriageway A roads 16.67%
Motorways 69.29%

99%
Concrete roads

1%
Asphalt roads

Percentage difference in May 2023 traffic compared to May 2019[5]

Up to 5.2m	+1%
5.2 to 6.6m	+3%
6.6 to 11.6m	+3%
11.6m+	+2%
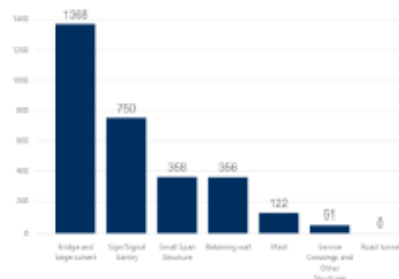
Schemes[5]

Scheme number	Scheme	Start of works	Open for traffic
11	A585 Windy Harbour to Skippool	Started	2023-24 Q4
12	M62 junctions 20 to 25	Cancelled	Cancelled
13	M6 junction 19	Started	Opened
14	A66 Northern Trans-Pennine	2023-24 Q4	RP3
15	A5036 Princess Way	RP3	-
16	M6 junctions 21a to 26	Started	2024-25 Q1
17	Mottram Moor Link Road and A57 link road	TBC	TBC
18	M56 junctions 6 to 8	Started	2023-24 Q2
19	M60/M62/M66 Simister Island interchange	2024-25 Q4	-

Midlands

Whether you're heading north to south or east to west across the country, you're likely to travel through our network in the Midlands.

This region comprises Areas 7 and 9. Both of these areas have transitioned to Asset Delivery Contracts.

Road Information[4]

Lane kilometres

Road type: ● Motorways ● Dual carriageway A roads ● Single carriageway A roads

| 0K | 0.5K | 1K | 1.5K | 2K | 2.5K | 3K | 3.5K | 4K |

Road type split

Dual carriageway A roads 40.95%
Single carriageway A roads 21.97%
Motorways 37.08%

98% Concrete roads
2% Asphalt roads

Percentage difference in May 2023 traffic compared to May 2019[5]

Up to 5.2m	-2%
5.2 to 6.6m	+12%
6.6 to 11.6m	+8%
11.6m+	+5%

Regional Demographic

10.8m[1] Population
£23,062[2] GVA per head

Regional Assets[3]

6,201 structures

Structure type split

| 1941 | 1628 | 1131 | 686 | 424 | 390 | 1 |

Schemes[5]

Scheme number	Scheme	Start of works	Open for traffic
20	A500 Etruria	Started	Opened
21	M6 Junctions 13 to 15	Started	Opened
22	M42 Junction 6	Started	RP3
23	A46 Coventry Junctions	Started	RP3
24	M40/M42 Interchange	Cancelled	Cancelled
25	A45/A6 Chowns Mill Junction	Started	Opened
27	A38 Derby Junctions	TBC	RP3
28	M54 to M6 link road	TBC	RP3
29	A5 Dodwells to Longshoot	Cancelled	Cancelled
30	A52 Nottingham Junctions	Started	RP3
31	M6 Junction 10	Started	2023-24 Q4
32	A46 Newark bypass	RP3	-
33	M42 Junctions 4 to 7 upgrade DHS running to ALR	Cancelled	Cancelled
34	M6 Junctions 4 to 5 upgrade DHS running to ALR	Cancelled	Cancelled
35	M6 Junction 5 to 8 upgrade DHS running to ALR	Cancelled	Cancelled
36	M6 Junctions 8 to 10a upgrade DHS running to ALR	Cancelled	Cancelled

East

With more than 600 miles of motorways and major A roads in the Eastern region, our roads provide main routes taking people and freight from the ports of the East Coast through the region to the M25, M1 and A1.

This region comprises Areas 6 and 8. Both of these areas have transitioned to Asset Delivery Contracts.
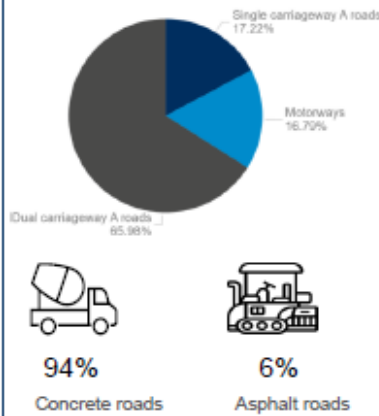
Road Information[3]

Lane kilometres

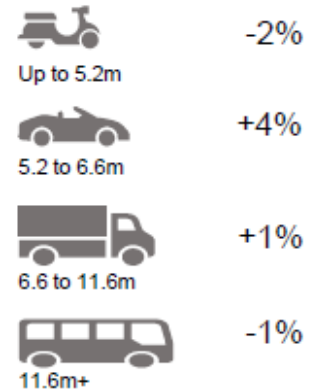Road type: ● Dual carriageway A roads ● Motorways ● Single carriageway A roads

0K 0.2K 0.4K 0.6K 0.8K 1K 1.2K 1.4K 1.6K 1.8K 2K 2.2K 2.4K 2.6K

Road type split

Single carriageway A roads 17.22%
Motorways 16.79%
Dual carriageway A roads 65.98%

Percentage difference in May 2023 traffic compared to May 2019[4]

Up to 5.2m   -2%

5.2 to 6.6m   +4%

6.6 to 11.6m   +1%

11.6m+   -1%

94% Concrete roads

6% Asphalt roads

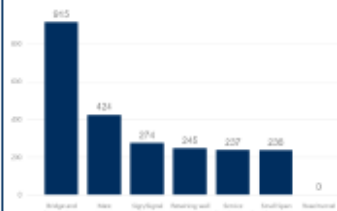### Regional Demographic

6.3m[1] Population

£25,602[2] GVA per head

Regional Assets[3]

2,331 structures

Structure type split

Schemes[5]

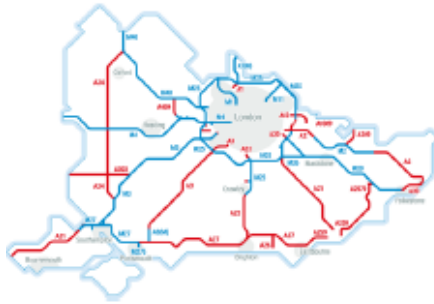| Scheme number	Scheme	Start of works	Open for traffic
26	M1 junctions 13 to 19	Started	Opened
37	A14 Cambridge to Huntingdon	Started	Opened
38	A47 Wansford to Sutton	2022-23 Q4	RP3
39	A47 Great Yarmouth Harfreys Junction	Started	2023-24 Q3
40	A47 Guyhirn junction	Started	Opened
41	A47 North Tuddenham to Easton	TBC	TBC
42	A47 Thickthorn junction	TBC	TBC
43	A47 Blofield to North Burlingham	TBC	TBC
44	A428 Black Cat to Caxton Gibbet	2023-24 Q4	RP3
45	A12 Chelmsford to A120	2023-24 Q4	RP3
46	M1 junctions 10 to 13 upgrade DHS running to ALR	Cancelled	Cancelled
71	A47 Great Yarmouth Vauxhall Junction	RP3	RP3

South East

From across Hampshire and Berkshire to Surrey, Sussex and Kent, our 500 miles of motorways and A-roads take people to visitor attractions like Windsor Castle, Ascot races, Legoland and Wembley Stadium.

This region comprises Areas 3, 4 and 5. Both of these areas have transitioned to Asset Delivery Contracts.

Road Information[3]

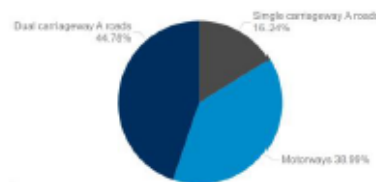#### Lane kilometres

Road type: ● Motorways ● Dual carriageway A roads ● Single carriageway A roads

0K 0.2K 0.4K 0.6K 0.8K 1K 1.2K 1.4K 1.6K 1.8K 2K 2.2K 2.4K 2.6K

Road type split

- Dual carriageway A roads 44.78%
- Single carriageway A roads 16.34%
- Motorways 38.99%

96% Concrete roads
4% Asphalt roads

Percentage difference in May 2023 traffic compared to May 2019[4]

Up to 5.2m	-3%
5.2 to 6.6m	-3%
6.6 to 11.6m	+1%
11.6m+	0%

Regional Demographic

8.8m[1]
Population

£32,526[2]
GVA per head

Regional Assets[3]

2,985 structures

Structure type split

1242, 471, 418, 314, 298, 238, 4
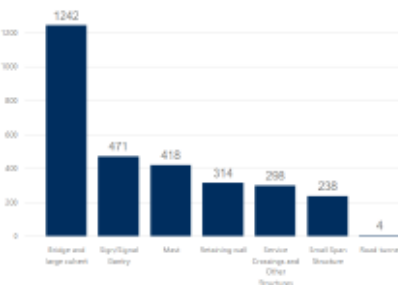
Schemes[5]

Scheme number	Scheme	Start of works	Open for traffic
47	M4 Junctions 3 to 12	Started	Opened
48	A34 Newbury to Oxford enhancements	Started	Opened
49	M3 Junctions 9 to 14	Cancelled	Cancelled
50	M27 Junctions 4 to 11	Started	Opened
51	M25 Junction 25	Started	Opened
52	M25 Junction 28	Started	RP3
53	M25 Junctions 10 to 16	Cancelled	Cancelled
54	M25 Junction 10	Started	RP3
55	M3 Junction 9	2024-25 Q4	RP3
56	M27 Southampton Junction 8	TBC	RP3
57	A27 Arundel bypass	RP3	-
58	A27 Worthing and Lancing improvements	2024-25 Q4	RP3
59	A31 Ringwood	Started	Opened
60	A2 Bean and Ebbsfleet	Started	Opened
61	M2 Junction 5	Started	2024-25 Q4
62	A27 East of Lewes package	Started	Opened
63	Lower Thames Crossing	2024-25 Q4	RP3
70	A21 Safety Package	Started	2024-25 Q4

1 ONS – Estimates of the population for the UK, England, Wales, Scotland and Northern Ireland (mid 2021)
2 ONS – Regional gross value added (balanced) by industry: all ITL regions 2021 data (Table 1c)
3 National Highways – Network size composition March 2023 (Regional Assets) March 2022 (Road Information)
4 Traffic volumes in May 2023 compared to May 2019, using National Highways sensor data
5 National Highways – Delivery plan 2023-24

South West

620 miles of motorway and strategic A-roads are at the heart of the South West's economic potential.

By maintaining and developing our roads we ensure the region can cope with the 21.4 million extra visitors that flock to the South West each year.
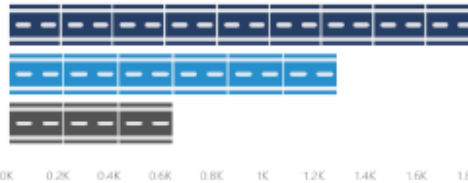
This region comprises Areas 1 and 2. Both of these areas have transitioned to Asset Delivery Contracts.
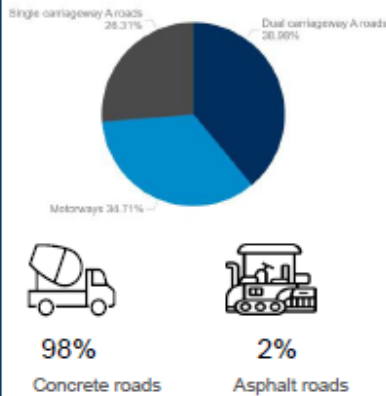
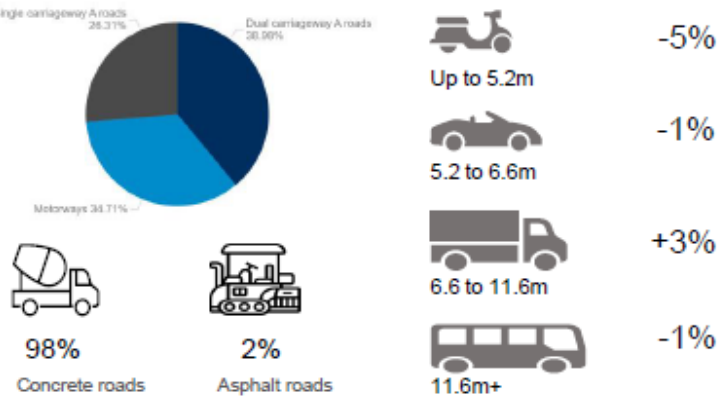### Road Information[3]

Lane kilometres

Road type: ● Motorways ● Dual carriageway A roads ● Single carriageway A roads

0K 0.2K 0.4K 0.6K 0.8K 1K 1.2K 1.4K 1.6K 1.8K 2K

Regional Demographic

9.3m[1]
Population

£15,196[2]
GVA per head

Road type split

Single carriageway A roads 26.31%
Dual carriageway A roads 38.98%
Motorways 34.71%

98%
Concrete roads

2%
Asphalt roads

Percentage difference in May 2023 traffic compared to May 2019[4]

Up to 5.2m	-5%
5.2 to 6.6m	-1%
6.6 to 11.6m	+3%
11.6m+	-1%

Regional Assets[3]

2,200 structures

Structure type split

911
373
293
232
230
160
1

Bridge and large culvert | Small Span Structure | Sign/Signal Gantry | Retaining wall | Mast | Service Crossings and Other Structures | Road tunnel
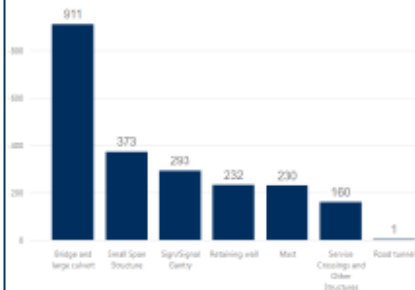
Schemes[5]

Scheme number	Scheme	Start of works	Open for traffic
64	A303 Sparkford to Ilchester	Started	2023-24 Q4
65	A303 Amesbury to Berwick Down	TBC	RP3
66	A358 Taunton to Southfields	2024-25 Q4	RP3
67	A30 Chiverton to Carland Cross	Started	2023-24 Q4
68	A417 Air Balloon	Started	RP3
69	M4 junctions 19 to 20 and M5 junctions 16 to 17 upgrade DHS running to ALR	Cancelled	Cancelled