

# HS2

## Health, Safety and Wellbeing Review 2024



I care. You count. We matter.

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Front cover image: HS2 worker at Curzon Street.  
Right: Workers placing waterproofing layers in base level at Old Oak Common.

# Context



Image: HS2 worker at east Euston site.

# Introduction

**HS2 is the UK's new high-speed railway and construction of the line is well underway. We're in our peak construction period, with more than 30,000 people delivering extensive works in high-risk environments across 350 live sites.**

We believe every single one of these people has the right to go home safe and well. Nothing is more important than our responsibility for the health, safety and wellbeing of everyone working on, affected by, and ultimately using HS2.

The risks inherent in any major infrastructure programme are heightened during the peak construction phase. This was tragically brought home to us when a supply chain worker died following an industrial incident at an HS2 site in the West Midlands in 2023. It was the first fatality since work on the project began.

Following an investigation, it was determined that the death was accidental and measures have been identified that could reduce the likelihood of future accidents on this and future projects. The inquest into the incident was concluded in January 2024, with key findings being shared across the industry.

Such tragedies are a stark reminder of why safety must remain at the heart of everything we do and we will continue to work with our construction

partners to raise safety standards through training, education and advances in technology for this programme and for the wider industry.

This Health, Safety and Wellbeing review reflects on our progress and challenges in 2023/24 and

highlights the actions we will take to meet future risks, challenges and opportunities to demonstrate with absolute integrity our unwavering commitment to protecting all our people from harm.



Construction works at River Blythe viaduct.

# How we're performing



Image: Operatives preparing match cast face at the viaduct precast factory.

# Health, safety and wellbeing

We publish an annual review detailing progress against our health, safety and wellbeing commitments to date, including case studies and performance information.

It is published to provide an update on progress in achieving our Health and Safety Strategy, which continues to put health and safety at the heart of our organisation as we move through peak construction.

As well as plans and progress, the documents collectively reflect on innovations and lessons learned, in which the scale and breadth of our delivery activity has grown significantly.

We have seen the number of hours worked increase from 62 million in financial year 2022/23 to 65 million in financial year 2023/24. This means we continue to have large numbers of people onsite in high-risk environments.

Our risk profile remained similar to the previous year as we continue to deliver work at scale. Lifting operations and working at height remain key risks although each area of the railway is at varying stages of the project lifecycle. Previous risks remain such as earthworks, which will continue into the forthcoming year.

We continue our commitment to health and safety by working closely with our supply chain, occupational health and safety leadership forums and working groups to drive best practice in identifying, understanding and managing risk.

Despite the level of risk brought about by thousands of people working in high-risk environments, we've exceeded our target, achieving a final index of 2.32 against our Health and Safety Performance Index (HSPI) target of 2.20. HS2 has seen a rise in the number of injuries from the previous year, in line with the number of hours worked, from 465 to 493. We also track our Lost Time Injury Frequency Rate (LTIFR) which allows us to benchmark our performance with others. Our LTIFR is 0.14 which has improved on the previous year rate of 0.16 at the end of March 2023. The actual LTIFR numbers decreased from 101 in 2022/23 to 91 in 2023/24.



Construction works at Old Oak Common.



# Health, safety and wellbeing

We also track High Potential (HiPo) and No Harm No Loss (NHNL) events.

Our HiPo rate increased to 0.27 (comprising 178 HiPos) in 2023/24, up from 0.22 (133 HiPos) in 2022/23. Our NHNL rate increased to 0.99 (comprising 640 NHNLs) in 2023/24, up from 0.97 (601 NHNLs) in 2022/23. We believe the increase in reporting of potential incidents, given the decrease in actual incident numbers, demonstrates an increase in safety culture and a willingness to learn a free lesson without suffering harm or loss.

We review our Health and Safety Performance Index (HSPI) measures annually. Following the review, we have identified areas to improve some of our measures for 2024/25. The chart opposite shows the HSPI scores by each measure, and total for the financial year 2023/24. From a positive perspective, all five of our leading HSPIs met our target. The key lagging indicator, Injury Weighted Index (IWI), saw a significant deterioration following the fatality in April 2023 and has seen a steady recovery throughout the year ending on 2.00, although did not meet the target of 2.2.

## HSPIs

Measure	HSPI 1	HSPI 2	HSPI 3	HSPI 4	HSPI 5	HSPI 6	Overall HSPI	Target
Financial year								
2018 – 2019	1.00	0.66	1.00	0.00	3.00	1.66	1.22	1.20
2019 – 2020	1.00	2.66	0.66	0.00	3.00	1.66	1.50	1.50
2020 – 2021	1.80	2.66	1.66	3.00	2.66	1.66	2.24	1.80
2021 – 2022	1.00	2.20	2.20	3.00	0.80	2.41	1.94	2.20
2022 – 2023	1.80	2.87	3.00	2.70	1.88	2.55	2.46	2.20
2023 – 2024	1.80	2.57	2.21	2.42	2.37	2.53	2.32	2.20

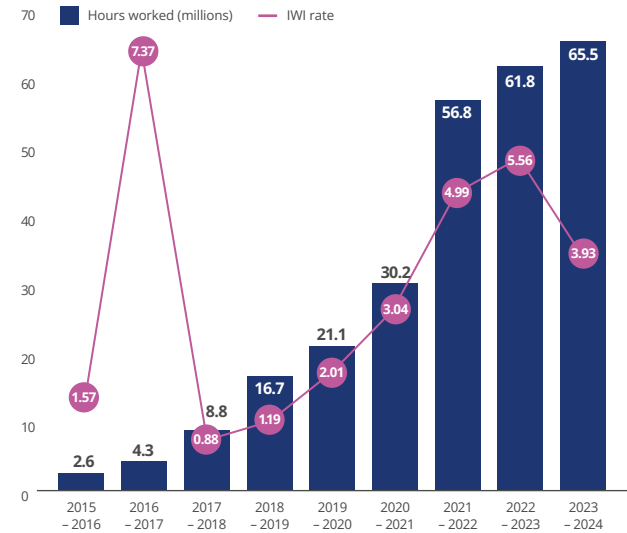


# Our health and safety performance

## Injury Weighted Index

# 3.93

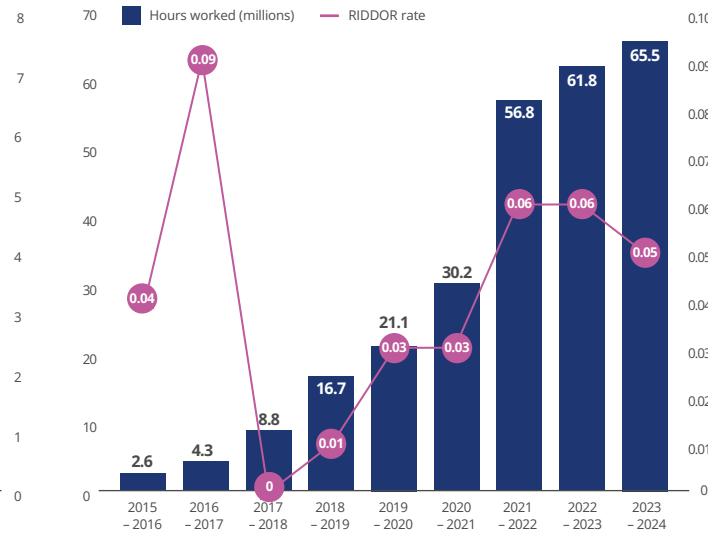
IWI rate v Hours worked per year



## Accident Frequency Rate (AFR) RIDDOR

# 0.05

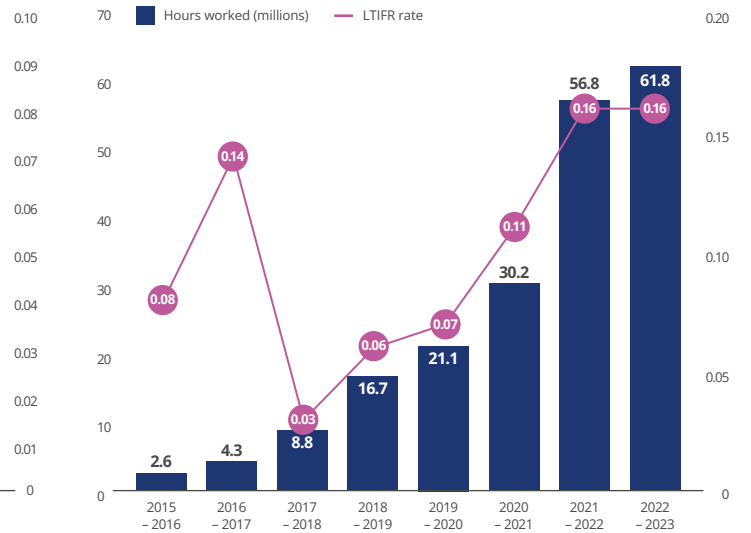
RIDDOR rate v Hours worked per year



## Lost Time Injury Frequency Rate (LTIFR)

# 0.14

LTIFR rate v Hours worked per year





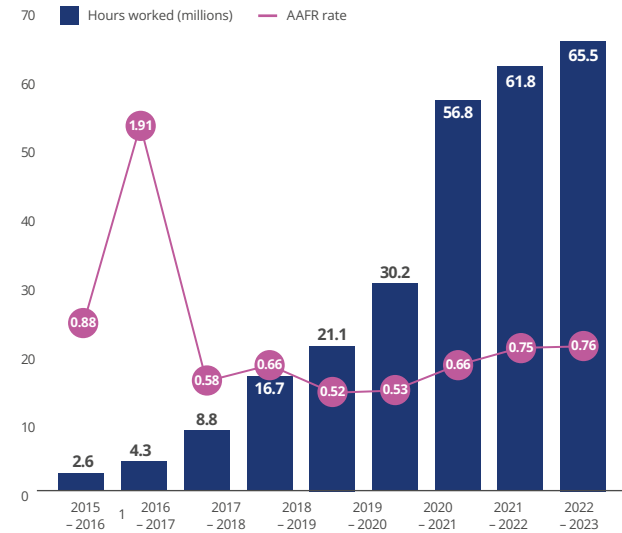


# Our health and safety performance

## All Accident Frequency Rate (AAFR)

0.76

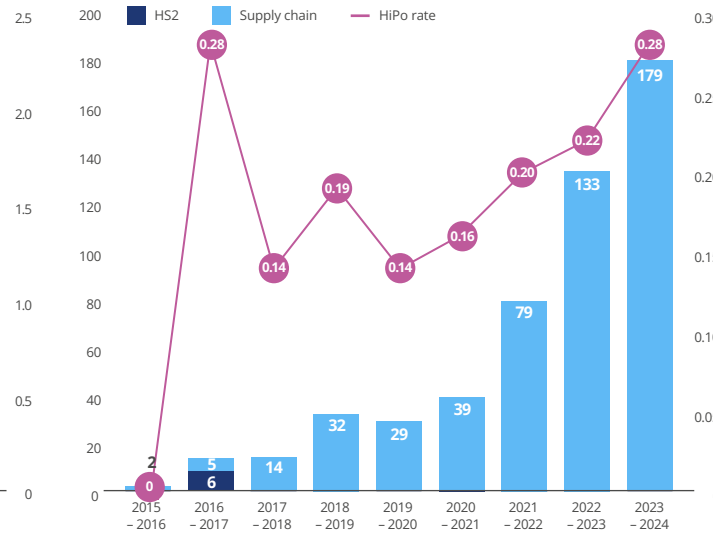
### AAFR rate v Hours worked per year



## High Potentials (HiPos)

0.28

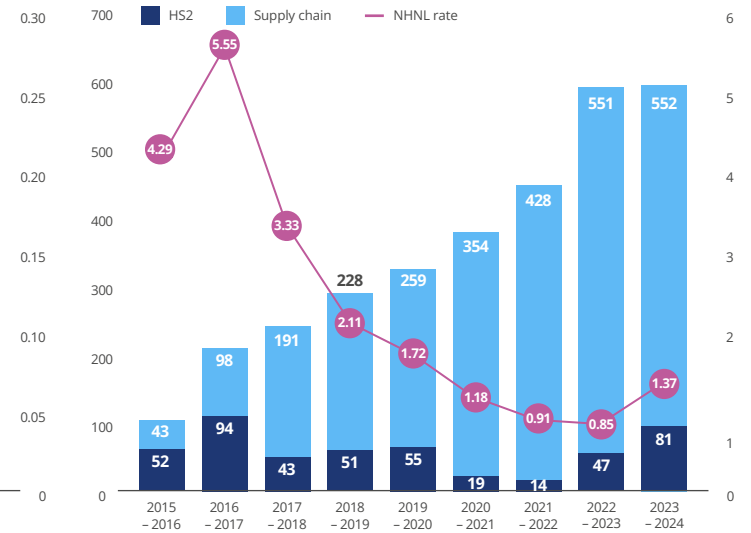
### No. HiPos reported each month



## No harm/no loss (Near miss)

1.37

### No. NHNL incidents reported each month



# Our approach and progress



Image: HS2 worker at Westbury viaduct.

# Safe at Heart

**Our health and safety focus areas and commitments are integral to our overarching, programme-wide ethos and approach, called Safe at Heart. Safe at Heart, together with strong leadership, an inclusive culture and robust performance measures allow us to achieve our strategic goals on health and safety.**

Safe at Heart crystallises how we behave and act across the HS2 programme and includes health, safety and wellbeing. We use Safe at Heart as a project-wide brand and on-going campaign, covering HS2 Ltd, our network of contractors and suppliers and our work in local communities to keep health and safety at the forefront of everyone's minds.

Safe at Heart makes it clear that everyone working on HS2 is accountable as:

- an **individual**
- as part of a **team and organisation**, and
- as part of a **collective**, working with our partners.

The three strands of accountability are brought together under Safe at Heart's three pillars, namely: 'I care. You count. We matter.'

Our programme-wide Health and Safety Operational Plan defines future interventions in each focus area to build on our achievements, address challenges and continually improve our performance. Year-on-year, it will form the baseline for measuring, reporting on and improving our progress in delivering against our strategy.



**I care**

**This means caring for ourselves, our colleagues and everyone affected by HS2 and our work. It's our individual accountability.**



**You count**

**This means making sure every decision and action we take in our teams and organisations counts towards our health and safety goal. It's our team accountability.**



**We matter**

**This means recognising that what we do, through our innovation and how we apply learning and best practice, matters to the legacy we leave for future projects and wider industry. It's our collective accountability.**



# Progress in delivering our health and safety strategy

**In May 2023, we published our refreshed Health and Safety strategy, which sets out our priorities for keeping everyone safe and well and leaving a legacy of improved standards. Our approach to health and safety is underpinned by our Safe at Heart philosophy, built around the three pillars of I care; you count; we matter.**

Our seven risk focus areas and a suite of deliverables known as our Safe at Heart commitments form the backbone of our health and safety strategy, defining where we can make the biggest improvements in health and safety performance. We hold ourselves to account for delivering progress against each of our focus areas year-on-year.

The following examples describe the key areas of progress we have made during the past year.



## Occupational health and wellbeing

- HS2 Ltd has started to collect occupational hygiene monitoring data to enable a more informed approach to understanding and addressing occupational health hazards.
- A study looking at fatigue across HS2 to understand where and when fatigue risk increases. Data is being collected from our joint ventures (JVs) on working patterns, and other construction-specific job characteristics to build a reliable model of fatigue risk.
- Our supply chain has proactively raised awareness of the top five health hazards through initiatives such as health videos and regular briefing of health hazards.
- Placements for occupational health practitioners have been set up and further engagement with the National Society of Occupational Health (NSOH) is helping to shape learning for future occupational health professionals.



## Workforce safety

- The Safe at Heart culture programme is developing through initiatives like Align's Safety Culture and Balfour Beatty VINCI SYSTRA (BBVS)'s Making Safety Personal.
- The adoption of a health and safety maturity framework underscores our commitment to prioritising occupational health and operational resilience, driving continuous improvement and ensuring sustained compliance with industry standards.
- Supervisor recognition through awards such as the Safe at Heart Inspiration award and technological and supply chain initiatives are enhancing safety practices.
- Working with our supply chain, we have focused on improving management of lifting activities, sought to apply a consistent approach to exclusion and restricted zone management and the establishment of common supervisor safety leadership principles across the programme.



# Progress in delivering our health and safety strategy



## Informed learning and assurance

- Comprehensive integrated assurance procedures have been developed for health and safety across all delivery areas.
- These procedures will ensure cohesive monitoring and evaluation of safety measures throughout 2024/25.



## Supply chain management

- Health and safety messages are now seamlessly integrated into our strategic market engagement process.
- Supplier relationship management has actively promoted safety initiatives during relevant supply forums, encouraging small and medium-sized enterprises (SMEs) to focus on specific safety-related areas.
- Newly implemented Tier 2 quarterly performance scorecard now includes safety metrics with HS2 Ltd commercial leads receiving regular updates, ensuring transparency and accountability in safety performance.



## Public and community health and safety

- We have developed management information for specialist support services, focusing on our most vulnerable people.
- Administrative systems have been put in place to handle special cases, including advocacy and translation.
- We are actively implementing the latest Special Cases Policy and Procedures, fostering a safe at heart culture.
- Our Respecting people, Respecting places strategy guides our engagement efforts as we build the railway. A major part of this is the dedicated HS2 Helpdesk, handling over 38,000 enquiries last year, and available 24/7 to address questions or concerns related to HS2, including health, safety and security.
- We have awarded the Specialist Security Services contract to maintain robust security measures for our activities.



# Progress in delivering our health and safety strategy



## Safe operations

- Ergonomics assessments are now integrated into the Design for Functional and Dynamic Development (DFDD) assurance packs.
- Rail systems contractors now have critical ergonomic information.
- System safety and ergonomics workstreams are harmonised, reinforcing our commitment to future safe operations.
- The Railway System Safety Strategy has been aligned with the latest HS2 organisational updates and the rolling stock interface system safety management plan has undergone development and review.
- Innovations such as the use of drone technology have also been investigated as ways to enable targeted trackside maintenance visits.



## Health and safety by design

- We have actively engaged the temporary works forum, to ensure HS2 alignment with best practices.
- Frontline workers are actively participating in constructability reviews.
- Key lessons learned from these reviews are being shared with designers.
- Contractors are establishing a process to relay feedback between site staff and designers.
- Supervisors are tracking the number of changes from the design office to the constructed 'field design' with the relationship between field design changes being proactively reviewed.
- Contractors and designers are collaboratively developing examples of good practice for circulation through regular forums such as the design director's call.

## Conclusion

The fatal accident on HS2 has strengthened our resolve never to be complacent when it comes to keeping our people safe and well. We have worked closely with the supply chain and identified critical lessons that will allow us to drive positive change in the industry.

We have also seen our HSPIs evolve as learning has been sought from benchmarking exercises and consultation with the supply chain. The aim of the HSPIs is to improve our health and safety performance. We strive relentlessly to achieve our HSPIs to create an environment where no one gets hurt.

The last financial year has seen solid health and safety performance, which should be considered alongside the risk profile we are seeing in the forthcoming year surrounding heavy equipment, lifting operations and working at height.

We will continue to interrogate beyond our indicators, investigating each significant incident and high-potential event to get to the root cause and continually improve how we manage risk. Working with the supply chain, we look to share learning across contracts, apply improvements programme-wide and remain diligent about the health, safety and wellbeing of our workforce.



# Health and safety showcase

Image: HS2 worker at Bromford tunnel intermediate shaft.

## Case study

### Safe maintenance operations

**Two of the top ten causes of fatalities and incidents on railways are due to out-of-hours maintenance work and working close to trains.\* We're using a technology-led approach to challenge traditional maintenance processes and achieve a step-change in safe maintenance operations.**

Drawing on current industry maintenance practice, procurement and innovation, our Infrastructure Management team has identified a range of measurement and monitoring techniques to support remote, rather than physical inspections. These include drones, on-track machines, passenger trains equipped with monitoring equipment and artificial intelligence.

As well as reducing the need for maintenance workers to work on or near the track, drive long distances out-of-hours or work overnight, these techniques are expected to enhance the quality of data collected in real-time. As the new rail systems contractors come on board, they, too, will play a part in HS2's safe maintenance aspirations.



**The health, safety and wellbeing of our future workforce who will be maintaining our assets is paramount. The development of different tools and technological initiatives which reduce the risks inherent with physical inspections will benefit both people on the ground and improve data quality."**

**Simon Morley**  
Head of infrastructure maintenance



Image: We're using a technology-led approach to challenge traditional maintenance processes. Copyright: Herrenknecht AG.

\*Analysis of the SMIS database for incidents between 2017 and 2022.



## Case study

### Safe at Heart Inspiration awards



Image: Danny Newland, site Manager, J Coffey Infrastructure Division working for BBVS, winner of the Safe at Heart Supervisor award 2023 at the HS2 Inspiration awards.

**The Safe at Heart Supervisor category of our annual Safe at Heart Inspiration awards put the spotlight on the skill, passion, dedication and selflessness demonstrated by the very best of our frontline leaders.**

These are the individuals who go above and beyond to keep site workers safe and well and whose safety leadership is fundamental to how we continually improve our health and safety performance and standards. Although our contractors make a significant investment in developing the skills of their supervisors, the impact of these individuals often goes unrecognised.

Award winner Danny Newland, at the time a site manager for J Coffey working for BBVS at Old Oak Common, impressed judges with his dedication to supporting others both within and outside work. As well as mentoring work experience students, acting as ambassador for the local apprenticeship scheme and implementing top tier health and safety practices, he also volunteers up to three nights a week.



**Danny showed every single one of us that genuine care and compassion doesn't just keep people safe and well, it can save and transform lives. A very worthy winner."**

**Paul Wright**

Health and safety and security director



# Case study

## HS2 Helpdesk

Complaints fallen by

**30%**

**99%**

of complaints resolved  
within 20 working days

No one chooses to live next to the UK's largest construction project. That's why listening and responding to the concerns of our local communities is integral to our commitment to respect the people and places where we work.

Our Helpdesk, managed by HS2's Public Response team, is open 24 hours a day every day of the year to help with any questions or concerns. There's also a dedicated complaints team on hand to respond if things go wrong.

Last year we received more than 40,000 enquiries. The number of complaints dropped by 30% from 1637 to 1147, with 99% of complaints resolved within 20 working days and 99% concluded at the first stage of the complaints process.

The team's dedication to continuously improving the way they resolve issues is reflected in a new corporate commitment to respond to urgent construction-related enquiries and complaints in a maximum of two working days. Over the past year 100% of responses have met this target.



Our helpdesk community engagement advisers show exceptional professionalism and composure in critical situations that can often pose significant risks to vulnerable and distressed stakeholders. We're trained to act swiftly and coordinate with the emergency services, when needed."

**Paul Allen**

Senior public response manager

# HS2

**High Speed Two (HS2) Limited**

Two Snowhill

Snow Hill Queensway

Birmingham B4 6GA

HS2 Helpdesk: 08081 434 434

Email: [HS2enquiries@hs2.org.uk](mailto:HS2enquiries@hs2.org.uk)

[www.hs2.org.uk](http://www.hs2.org.uk)