

Health and safety in highways report 2026



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Introduction

This report brings together a clear, up-to-date view of health and safety performance across the highways sector.

Teams are building, repairing, and maintaining roads while working around live traffic, heavy plant, night shifts, and exposed conditions – and bringing awareness to the issues is critical.

This report covers:

- **Safety failures and their impacts reported by HSE (2024-26)**
- **Issues with reporting**
- **Incursions**
- **Worker abuse**
- **Technology**

Where data does not relate to 2026, the reference year is stated.



1 Safety failures and their impacts reported by HSE (2024-26)

Behind every fine, prosecution, and fatality is a moment that probably looked manageable at the time. Recent HSE cases show the repeating patterns: obvious risks normalised, basic controls missing, and ordinary decisions left to carry consequences no one could contain once things went wrong.

Total HSE fines:

- £33+ million (aggregate fines from all HSE-led prosecutions in The UK during financial year 2024/25)¹.
- Company directors prosecuted: 18 (includes prosecutions commenced under Section 37 HSWA, some of which did not lead to conviction – e.g. 3 acquittals, 1 formal caution)².
- Construction sector fatalities: 35 (number of construction worker deaths in The UK in 2024/25 – provisional HSE figure, to be finalised July 2026)³.

¹ https://assets.publishing.service.gov.uk/media/691ee91cd3a80970b766f08e/Health_and_Safety_Executive_Annual_Report_and_Accounts_2024_to_2025.pdf

² <https://www.fisherscogginswaters.co.uk/blog/article/395/section-37-in-2025-hse-s-director-prosecutions>

³ <https://www.chsg.co.uk/hse-release-2024-25-industry-statistics/>

Compliance issues by area

1. Traffic management & vehicle segregation failures

Breakdowns in traffic management protocols have been a recurring cause of serious incidents.

- In one tragic and high-profile case, Marlborough Highways Ltd were prosecuted after a road resurfacing project lacked basic vehicle-personnel segregation⁴. No banksman was used to guide a reversing road-sweeper on a residential street job, and no barriers kept ground workers clear of moving plant. A worker was struck and killed, and HSE investigators deemed the site traffic management system “inadequate and unsafe,” exposing both workers and the public to extreme risk.
- Another incident described a fatal delivery accident under overhead lines at a construction site, where a lack of on-site traffic routing and warning signage led a tipper driver into a deadly situation⁵.

More broadly, workplace transport incidents – vehicles hitting people – remain among the top causes of work-related deaths in Britain⁶, leading to corporate manslaughter charges or multi-million-pound fines.



2. Inadequate planning and risk assessment

Multiple incidents traced back to a failure in planning work safely or assessing site-specific risks. Work near live traffic and hazards weren't sufficiently prepared for, leading to dangerous improvisation or oversight.

Examples:

- A 2024 incident⁷ on the A3102 in Wiltshire saw a tree-surgery crew working at night near an 11 kV overhead power line without proper precautions. The company had secured a roadworks permit for night work but failed to update their risk assessment for the overhead line hazard. As a result, a worker suffered a near-fatal electric shock when a lighting tower contacted the cable. HSE found no effective controls (no safe exclusion zones, barriers, or special training) had been implemented despite the obvious risk.
- Beyond the roads, in a 2026 prosecution a grounds maintenance firm was fined after a young worker was killed while mowing a steep roadside area where no site-specific risk assessment had been done⁸. A critical safety device (the mower's roll-over protection bar) had even been removed before work.
- Insufficient planning was cited as a cause in some of the largest recent fines – for example, a £6 million fine for Cambridgeshire County Council in 2025 for triple fatalities due to “inadequate planning, lack of guidance, and absence of signage”. An HSE investigation also found that basic safety measures were missing across a busway, including lighting of some crossing points, appropriate speed limits for buses, sufficient measures to separate pedestrians and other users, including cyclists, from passing buses, and adequate signage warning of dangers. The incidents occurred between 2015-21⁹.

⁴ <https://press.hse.gov.uk/2025/10/16/construction-company-fined-1m-following-death-of-employee/>

⁵ <https://www.ashtonslegal.co.uk/insights/business-news/health-and-safety-prosecutions-some-recent-cases/>

⁶ <https://www.ashtonslegal.co.uk/insights/business-news/health-and-safety-prosecutions-some-recent-cases/>

⁷ <https://press.hse.gov.uk/2026/05/05/man-thought-he-was-going-to-die-after-electric-shock-from-overhead-powerline/>

⁸ <https://press.hse.gov.uk/2026/02/18/grounds-maintenance-company-fined-after-employee-killed-operating-ride-on-lawnmower/>

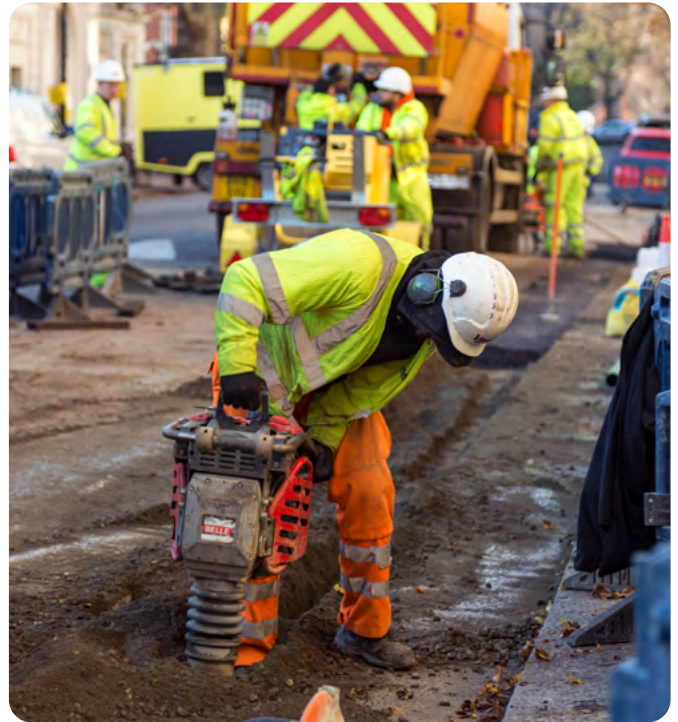
⁹ <https://www.localgovernmentlawyer.co.uk/transport-and-highways/443-transport-and-highways-news/60652-county-council-hit-with-6m-fine-over-busway-deaths>

3. Equipment safety and maintenance lapses:

Several recent accidents in highways-related work were caused by non-compliance with equipment safety standards – specifically, failing to maintain or use safety devices on machinery.

In February 2024, an operative's leg was traumatically amputated by a road milling machine (planer) in Hampshire¹⁰. The contractor, Power Plane Ltd, had either removed or not fitted the manufacturer's protective guard on the rotating drum. HSE's investigation found this was not an isolated oversight – the company had a routine practice of operating without required guards, and this directly led to the accident. In the aftermath, the HSE emphasised that guarding dangerous parts of machinery is a basic legal requirement and that this "wholly avoidable incident" could have been prevented by simply using the safety equipment as designed.

This case reflects a culture of complacency or corner-cutting in equipment safety, which can yield disastrous results. Power Plane Ltd were fined over £92,000 plus costs in 2026 for breaching the Provision and Use of Work Equipment Regulations¹¹ – a figure that does not account for intangible costs like reputational damage, increased insurance premiums, and the impact on the families and workers involved.



4. Training and competence gaps:

Investigations have cited a lack of proper training or instruction as underlying causes for multiple incidents. For example, HSE found that in the overhead powerline incident (Section 2: Inadequate planning and risk assessment, page 5), workers were not adequately instructed or trained in the safe use of the mobile lighting tower around high-voltage lines¹².

In another incident with forklifts, outside of highways but illustrating a common issue, an untrained forklift driver in a yard caused a severe crush injury leading to a partial leg amputation. This time, the company involved had never authorised or trained that worker to use a forklift, resulting in a £30,000 fine in 2026 to go along with the worker's life-changing injuries.

Inadequate supervision is another recurring factor. One HSE review noted a director's five-year disqualification for repeatedly ignoring improvement notices, highlighting how management's neglect of safety responsibilities can be as deadly as frontline errors¹³.



¹⁰ <https://www.saferhighways.co.uk/post/road-planing-contractor-fined-after-worker-suffers-leg-amputation-in-milling-machine-incident>

¹¹ <https://www.saferhighways.co.uk/post/road-planing-contractor-fined-after-worker-suffers-leg-amputation-in-milling-machine-incident>

¹² <https://press.hse.gov.uk/2026/05/05/man-thought-he-was-going-to-die-after-electric-shock-from-overhead-powerline/>

¹³ <https://www.ashtonslegal.co.uk/insights/business-news/health-and-safety-prosecutions-some-recent-cases/>

2 Reporting issues: UK infrastructure's blind spot

The effectiveness of any safety process depends on what gets recorded. Across many operations, defect reporting remains inconsistent – with checks missed and faults unlogged.

Risks

A fresh perspective on workplace fatalities

A recent National Highways Home Safe and Well webinar on occupational road risk¹⁴ highlighted a significant gap in how incidents are captured and understood across the highways supply chain. The panel also discussed coming initiatives to address the issues.



Image: National highways

The discussion between Teresa Moss, Mark Cartwright, Nick Holt, and John Haslam – representing National Highways and the Supply Chain Safety Leadership Group – pointed to a clear disparity between approximately 1,700 annual road deaths in the UK¹⁵ and just 138 workplace fatalities recorded under RIDDOR – a mismatch that becomes more striking given the scale of work-related driving.

The conclusion was that despite potentially being linked to work, most road traffic collisions fall outside RIDDOR reporting requirements. They don't trigger the same level of investigation, escalation, or shared learning as incidents on site.

The result is that organisations can appear to be performing well from a safety perspective while a significant proportion of risk sits outside formal reporting systems.

- In an informal LinkedIn poll referenced during the webinar, around 80% of respondents said their business treated non-reportable incidents less seriously than reportable ones, leading to lower levels of investigation, limited behavioural change, and a reduced flow of lessons learned across the business.
- For highways work – where much of the risk occurs between sites rather than on them – this creates a clear inconsistency in how safety is managed.
- The issue is not the absence of standards. Frameworks such as GG128¹⁶ already requires reporting of road traffic collisions when travelling for or on behalf of National Highways business, excluding normal commuting.

¹⁴ <https://www.youtube.com/watch?v=6dIAgfoMKUE>

¹⁵ <https://www.brake.org.uk/get-involved/take-action/mybrake/knowledge-centre/uk-road-safety>

¹⁶ <https://www.standardsforhighways.co.uk/tses/attachments/e86b7699-ed01-4806-a0fc-9fe11c8e73ee>

Poor levels of defect reporting

Across the National Highways supply chain, vehicle checks have been highlighted as a consistent issue¹⁷:

- In roadworthiness spot checks conducted by National Highways and Warwickshire Police, around 40% of vehicles from the supply chain failed basic legality checks.
- Around 85% of issues were simple faults – tyres, lighting, or load security.

Most of these failures point back to checks not being completed before vehicles leave site, rather than complex mechanical issues.

At the same time, incident data¹⁸ shows that the most serious collisions are primarily driven by driver behaviour, including fatigue, distraction, and impairment, rather than vehicle failure:

**Around 85-90%
of collisions**

involve at least one driver/rider-related factor.

Around 65-75%

involve driver error, behaviour, or impairment.



Managing human behaviour: where risk is actually controlled

In practical terms, this requires a shift away from basic compliance alone, towards active management of how people drive and operate on the network.

This includes:

- Prioritising driver fitness and condition, not just licence checks.
- Putting controls in place to manage fatigue, workload, and wellbeing.
- Implementing systems to monitor and measure driver behaviour over time.
- Ensuring driving is fully embedded within existing health and safety processes, rather than treated as an external activity.
- Supporting this through training, standards, and consistent reporting expectations across the supply chain.

The Home Safe and Well webinar¹⁹ also pointed to the need for longer-term structural changes, including the introduction of a driver passport system and the adoption of fatigue and behaviour monitoring standards, designed to bring consistency across the sector.

Alongside these controls sits a broader cultural point. Driving risk is not confined to individual drivers – it is shaped by planning, scheduling, and organisational pressure. As highlighted in the webinar, employees are often on the road because they are working, meaning businesses have a direct role in influencing outcomes.

Taken together, this shifts responsibility from the vehicle to the system around the driver. Managing occupational road risk effectively therefore depends on how organisations plan work, monitor behaviour, and respond to early warning signs – not just whether vehicles are compliant at the point of departure.

¹⁷ <https://www.youtube.com/watch?v=6dIAgfoMKUE>

¹⁸ <https://www.gov.uk/government/statistics/reported-road-casualties-great-britain-annual-report-2023>

¹⁹ https://youtu.be/6dIAgfoMKUE?si=vMx-LXgYZpxKP_uK

The result: National Highways' Common Intent Document

National Highways

National Highways intends to address these issues. A Common Intent Document, currently being finalised, will establish a single set of expectations for all suppliers working on the network²⁰. Rather than introducing entirely new concepts, it brings together existing good practice and sets a clear baseline for how road risk should be managed in day-to-day operations.

The document focuses on five key areas:



Fleet management

Requiring organisations to assess their current performance, implement formal driving-for-work policies, and align with frameworks such as Driving for Better Business (DFBB)²¹.



Drivers

Placing greater emphasis on fitness to drive, behaviour monitoring, and ongoing training.



Vehicles

Ensuring consistent checks, appropriate safety equipment, and planned upgrade cycles.



Reporting

Requiring all work-related road traffic collisions to be reported within one day, including incidents involving subcontractors.



Improvement

Encouraging the adoption of new standards and the sharing of lessons learned across the supply chain.

Alongside this, a number of supporting system changes are being introduced to enable clearer oversight and consistency.

These include a driver module within the National Highways Passport²² to track qualifications and compliance, performance monitoring to measure how well standards are being adopted, and the development of new expectations around fatigue and behaviour monitoring.

Over the longer term, suppliers will also be expected to move towards higher vehicle safety standards through managed fleet renewal.

Delivering change across the supply chain: the timeline

The rollout of these changes is intended to take place in stages²³.

In the short term (0–12 months), the focus is on aligning the supply chain through DFBB registration, gap analysis, and the adoption of appropriate accreditations. This will be followed by the introduction of driver standards and monitoring approaches over the next 12–18 months, including new requirements around behaviour and fatigue management.

Longer-term changes, such as fleet upgrades and full compliance tracking, are expected to develop over a two-to five-year period, recognising the scale and cost involved.

The focus is moving towards monitoring adoption and measuring impact, with performance tracked across the supply chain.

²⁰ <https://nationalhighways.co.uk/suppliers/>

²¹ <https://www.drivingforbetterbusiness.com/>

²² <https://www.highwayspassport.co.uk/>

²³ https://youtu.be/6dIAgfoMKUE?si=vMx-LXgYZpxKP_uK

3 Updates on incursions from across the network

Incursions continue to be analysed in depth across the sector. Another recent *Home Safe and Well* webinar brought together speakers from Balfour Beatty, National Highways, Virtus Traffic Management, Highway Resource Solutions, Costain and others to share the latest updates²⁴.

Current risk

Incursions remain one of the most serious risks faced in live roadworks²⁵:

- 144 incursions were recorded in a single month (October).
- 5,899 incursions in 2024 (around 492 a month) and a sharp upward trend²⁶.
- Frontline feedback shows 90%+ of operatives are concerned and have witnessed incursions.
- 157,000 planned road closures were delivered across the network, each creating potential exposure points.

Examples included vehicles entering closures deliberately, drivers falling asleep at the wheel, and high-speed incursions linked to police pursuit or loss of control.

	Year	Number of incursions
	2019	2,171
	2020	2,468
	2021	3,886
	2022	1,874
	2023	2,034
	2024	5,899
	Total	18,332

Recent site examples²⁷ brought this to life:

- An HGV stopped in a live lane, moved cones to access a gap in the barrier, and entered a works area to take a break, despite having no connection to the job.
- During overnight works, a vehicle evading police entered the worksite at speed, demonstrating how rapidly high-risk incursions can occur despite controls being in place.

These examples reinforce that incursions are often unpredictable, sometimes deliberate and rarely within the control of those managing the works.

Where performance is improving

Data shared by the Home Safe and Well working group shows progress, but not consistency:

- The webinar reported year-on-year progress in reducing high-risk “seek benefit” incursions.
- Technology deployment increased to around 49% of closures, up from 44% the previous month.
- Over a 12-month period, incursion protection deployment increased from 36% to 52% of jobs.
- This equates to 560 additional closures with protection in a single month compared to the November 2024 baseline.

Adoption is uneven:

- Some regions consistently operate above 80% technology usage²⁸.
- Others have seen significant drops or low baseline adoption.

²⁴ <https://youtu.be/bxV3rAMNqvk?si=4q7PzjVxRpnGlxpH>
²⁵ <https://www.saferhighways.co.uk/post/national-highways-warns-of-danger-to-roadworkers-as-incursions-set-to-double>
²⁶ <https://www.constructionnews.co.uk/health-and-safety/driver-incursions-into-roadworks-sites-rise-300-in-a-year-31-01-2025/>
²⁷ <https://youtu.be/bxV3rAMNqvk?si=4q7PzjVxRpnGlxpH>
²⁸ <https://youtu.be/bxV3rAMNqvk?si=4q7PzjVxRpnGlxpH>

Shift to data-led control

For National Highways, a major change is how incursions are being tracked and managed²⁹:

- Regional performance is being compared directly, highlighting hotspots such as the South East and East regions.
- Monthly reporting tools now include location data, heatmaps, and historical patterns³⁰.
- Incursions are now measured per 100 closures and per 1,000 lane miles, not just total volume.

Regional incursion groups are being expanded to improve local accountability, strengthen feedback into the national group, share best practice and improve coordination with emergency services.

The shift is from reporting incidents to actively targeting where they occur and why.

Technology and operational changes

Several operational changes are being pushed across the network:

- Wider rollout of incursion protection and warning systems across closures.
- Use of 'enhanced mobile carriageway closure' (EMCC) methods, with 11,700 passes recorded up to November 2025.
- EMCC uses a vehicle-led closure to create short traffic-free windows, allowing traffic management to be deployed without exposing operatives to live traffic³¹.
- Increased focus on barrier systems, works access gates, and physical controls at entry points³².
- Development of new physical controls, such as crash-tested works access gates³³.

These physical controls are designed to address known failure points, such as gaps in temporary barriers where vehicles or debris can enter works areas during incidents.

At the same time:

- Blue light incursions are being addressed through a training video that will be mandated for police drivers in England and Wales from 2026, with versions planned for other emergency services.
- In some regions, enforcement activity – including notable prosecutions – is being used as one tool to reduce risk.
- Controls are being applied more widely than before, but still depend heavily on local uptake and regional consistency.

Direction of travel

The emphasis is increasingly on eliminating exposure, not just protecting people once they are already at risk.

This reflects the reality shown in the examples above – that even well-designed controls can be breached, and the most effective way to reduce harm is to remove the need for people to be exposed in the first place.

A roadmap³⁴ is already being shaped through working groups and industry collaboration:

- Expansion of regional incursion groups and data use.
- Continued increase in technology deployment across closures.
- Rollout of training and awareness work³⁵ beginning with police drivers, with versions planned for other emergency services.
- Focused task groups on communication, sharing and elimination strategies.
- Outputs from the Incursions & IPV Working Group's annual industry event at Moreton-in-Marsh will help shape planning for 2026.

²⁹ <https://nationalhighways.co.uk/our-roads/annual-regional-benchmarking-dashboard-2024-25/>

³⁰ <https://www.supplychainschool.co.uk/partners/national-highways/controlling-our-network/>

³¹ <https://www.chevrontm.com/traffic-management/enhanced-mobile-carriageway-closure>

³² <https://hillandsmithinfrastructure.com/asset-vrs/solutions/vehicle-incursion-defence-systems/>

³³ <https://www.highwaysmagazine.co.uk/companies-and-contracts/hill-smith-infrastructure-launches-breakthrough-anti-incursion-barriers>

³⁴ <https://youtu.be/bxV3rAMNqvk?si=4q7PzjVxRpnGlxpH>

³⁵ <https://www.costain.com/media/press-releases/2026/costain-collaborates-with-police-to-improve-road-safety/>

4 RAISE – Roadworker Abuse Incursion Safety Exchange

Across the industry, there is growing recognition that road worker abuse and incursions are widespread problems – but poorly understood due to a lack of visibility.

One issue is that many incidents go unreported: workers often view abuse as part of the job and feel that reporting leads to little action.

Laura Hogg, associate director at Beaumont Traffic Management, explained in a recent interview, “We know it’s a problem but we don’t actually know how big that problem is. We’re having to start at the beginning and start getting that data.”

That lack of visibility and action is precisely what the RAISE platform has been designed to address.



What is RAISE?

RAISE is a centralised, industry-wide data-sharing platform. It enables organisations to submit incident reports into a shared system, building a collective understanding of risk across the network.

"It's an exchange of data basically between all of the organisations within our industry – sharing that knowledge and sharing that learning and coming together to solve the problem collectively.

"There's never existed a single place where these can be correlated and the data can be examined and root causes can be identified," Hogg noted, pointing to a long-standing gap in how the industry handles safety intelligence.

By bringing that information together, RAISE aims to:

- Create a clearer, more consistent picture of what's happening on the network.
- This shared dataset can begin to highlight patterns over time.
- This will develop visibility. Data will unlock trends showing where incidents are most likely to occur, what conditions contribute to them, and how they might be prevented.

The hope is that organisations will continue to record and



Laura Hogg, Creator of RAISE

validate incidents internally, but with the added benefit of feeding into a wider, collective view. At the moment, one company experiences abuse in a location, and another arrives the following week with no knowledge of what's happened and experiences the same thing.

As Hogg explains, the RAISE platform is designed to "add another level of intelligence" to road working rather than disrupt established systems.

This broader visibility has practical implications for how work is planned and delivered:

- With access to shared insights, teams across the country can better understand the risks associated with specific locations before arriving on site.
- This will help them make more informed decisions around traffic management, site design, and protective measures.

Shared data: the next step in safety

The ambition is that RAISE will enable a more proactive model of safety – one where risks are anticipated and mitigated earlier, rather than responded to after the fact. But the success of that shift depends on collective participation. The value of RAISE grows with every contribution, reinforcing the idea that improving safety across the network is a shared responsibility – by “sharing that knowledge and sharing that learning to solve the problem collectively,” Hogg said.





Industry quotes on abuse and incursions

We recently interviewed Re-flow clients Jointline and Core Highways and figures from the Supplier Delivery Forum on the topic of incursions and abuse. Where incidents are most likely to occur, what conditions contribute to them, and how they might be prevented.

Abuse is not just verbal, and awareness is ahead of enforcement

“ We get bottles of urine thrown at us, we get physical abuse. We’ve had guys have their legs broken. We get it all day, every day, day in, day out, night in, night out. The campaigns are there. But the main issue is policing isn’t there to support it. Unless someone actually comes out and starts to prosecute, it isn’t going to change.

Ryan Harris
Regional Director of the Southwest
Core Highways



The industry cannot see the full picture

“ I would say all forms of abuse are underreported at the moment. Verbal abuse is the most prominent but no single form of abuse is consistently reported. At the moment it would appear that anybody that’s working on the road in a high-vis jacket is a legitimate target.

Andy Murray
General Manager, HW Martin
Chair, Supplier Delivery Forum (SDF)



Culture change has to come from the top

Collaboration and a shift in attitudes are key to solving these issues.

“ We have to have a cultural change that our site teams do report regularly when anything’s happened.

Julie Davidson
Head of Business Assurance
Jointline



5 H&S performance: other key stats and trends across highways and wider infrastructure

Fatalities: a long-term concern

While up to date figures from 2026 have yet to be released, workplace fatalities remain one of the clearest indicators of safety performance³⁶.

- 124 workers were killed in work-related accidents across The UK in 2024/25 – the last recorded official data.
- 35 of these deaths were in construction, which includes many road and civils projects.
- This is down from 51 construction deaths in 2023/24, the highest annual total since 2008/09³⁷.
- The latest figure sits below the five-year average of around 40 construction fatalities per year³⁸.

Where incidents are most likely to occur, what conditions contribute to them, and how they might be prevented.

Injuries: the hidden scale

- Around 50,000 construction workers per year report workplace injuries³⁹.
- This reflects a three-year average across 2022/23-2024/25.
- Serious injuries – including fractures and amputations – remain consistently high.

In highways work, these often stem from the same root causes.



³⁶ <https://www.chsg.co.uk/hse-release-2024-25-industry-statistics/>

³⁷ <https://www.constructionnews.co.uk/health-and-safety/industry-on-course-for-fewest-ever-site-deaths-15-04-2025/>

³⁸ <https://www.chsg.co.uk/hse-release-2024-25-industry-statistics/>

³⁹ <https://www.ioshmagazine.com/2025/12/02/constructions-non-fatal-injury-rate-significantly-high-compared-all-industries>

Common causes of incidents

The leading causes of fatalities in construction carry through into highways environments:

- **Falls from height**
 - Accounted for over 50% of construction deaths in 2023/24⁴⁰.
- **Struck-by incidents**
 - Typically 10-15% of fatalities⁴¹.
 - Includes vehicles, plant, and falling objects.
- **Contact with moving plant or collapsing structures**

Despite long-term improvements, the UK's workplace fatality rate has plateaued over the past decade, prompting renewed focus on persistent risks⁴².

Near misses and leading indicators

- Incursions on National Highways sites⁴³ rose from around 2,034 in 2023 to nearly 5,900 in 2024.
- This is a year-on-year increase of roughly 190%.

This surge has been partly linked to higher volumes of roadworks in 2024. As discussed earlier in this report, it also points to growing issues with driver behaviour, including impatience and non-compliance.

Not all trends are worsening.

- Reported abuse and assaults on roadworkers fell to 132 incidents in 2024, down from 294 in 2019.

This may reflect improved awareness and campaigns such as Stamp It Out. However, under-reporting remains a concern.



⁴⁰ <https://www.highwaysindustry.com/a-70-rise-in-worker-deaths-how-technology-training-and-campaigns-are-tackling-the-uks-safety-crisis-in-highways-and-construction/>

⁴¹ <https://www.highwaysindustry.com/a-70-rise-in-worker-deaths-how-technology-training-and-campaigns-are-tackling-the-uks-safety-crisis-in-highways-and-construction/>

⁴² <https://www.hse.gov.uk/statistics/fatals-overview.htm>

⁴³ <https://www.constructionnews.co.uk/health-and-safety/driver-incursions-into-roadworks-sites-rise-300-in-a-year-31-01-2025/>

6 The hidden driver: commercial pressure and programme risk

Across the highways sector, safety risk is rarely created at the point of delivery alone. It is more often shaped much earlier – in programme design, contract models, and the commercial pressures that influence how work is planned and executed.

The move into RIS3 brings over £27 billion of investment, with a major shift towards renewals and maintenance rather than large standalone schemes.

That means more work delivered:

- In shorter windows.
- Under live traffic.
- At night.
- On ageing assets not designed for modern maintenance.

At the same time, commercial expectations are tightening. SDF2 introduces performance based allocation – meaning future work depends on consistent delivery, not just winning the framework⁴⁴.

This creates a structural tension:

- Deliver faster, but with less margin for error.
- Maintain productivity, but within tighter constraints.
- Reduce disruption, but without increasing exposure.

When that tension isn't planned for, it inevitably impacts those delivering the work.

Rework is the clearest signal.

In construction, avoidable errors account for nearly 21% of project value⁴⁵ – and 39 % of construction injuries occur during rework⁴⁶.



Image: gov.uk

This map details the principal programmes of investment which will be delivered by the Road Investment Strategy 3 (RIS3).

⁴⁴ <https://www.gov.uk/government/publications/strategic-road-network-interim-settlement-2025-to-2026>

⁴⁵ <https://getitright.uk.com/>

⁴⁶ <https://www.supplychainschool.co.uk/wp-content/uploads/2025/06/Pause-for-Quality-Toolbox-Final-21-May-25-002-1.pdf>



7 Technology adoption

An evolution in EMCC

Across highways, safety technology is promising to directly reduce exposure to live traffic and improve situational awareness on site.

One of the clearest examples is the previously mentioned Enhanced Mobile Carriageway Closure (EMCC) technique, designed to create short, controlled, traffic free working windows.

Newer EMCC vehicles like Highway Care's Eagle EMCC⁴⁷ combine:

- Multiple high resolution cameras to detect approaching vehicles.
- Automated incursion alerts sent directly to operatives via wearable devices.
- Real-time video feeds and recording for incident review and evidence.

If a vehicle breaches the closure, operatives are warned instantly.

Incursion detection more widely

AI-powered monitoring is emerging on worksites.

Modern camera systems can now⁴⁸:

- Identify vehicles entering closed lanes in real time.
- Detect near miss behaviour before an incident happens.
- Trigger immediate alerts to site teams and control centres.

Wearable technology is evolving too

Helmet alerts⁴⁹ and connected devices are being developed for infrastructure businesses to warn operatives of nearby hazards, while also helping track fatigue⁵⁰, movement, and exposure to risk over time.

⁴⁷ <https://highwaycare.com/highway-care-launches-innovative-eagle-emcc-vehicle>

⁴⁸ <https://www.clearway.co.uk/incursion-monitoring-and-detection/>

⁴⁹ <https://piptfw.co.uk/blogs/news/how-wearable-tech-is-improving-construction-site-safety>

⁵⁰ <https://www.cavendishprofessionals.com/wearable-tech-for-worker-safety-from-smart-helmets-to-gps-trackers/>

8 Outlook: the next five years in highways safety

From compliance to proof

Organisations such as the Office of Rail and Road are strengthening their role in monitoring performance and 'holding National Highways to account'⁵¹, including benchmarking regional performance and assessing safety outcomes annually.

At the same time, National Highways and its supply chain are introducing frameworks⁵² that require:

- Faster and more consistent reporting of incidents.
- Greater visibility of leading indicators.
- Standardised approaches to managing occupational risks.
- Clear evidence of improvement over time.

From reactive to predictive safety

Technology is accelerating a shift to new ways of working on our roads.

Digital tools are enabling:

- Earlier risk detection.
- Data led decision making.
- Reduced reliance on manual intervention.
- Better coordination of work across the network.

More and more, those leading the sector will use data to drive early intervention, embed technology into daily operations, and increase data visibility around each area where risk is present.



⁵¹ <https://www.orr.gov.uk/holding-strategic-highways-company-account>

⁵² <https://www.gov.uk/government/publications/road-investment-strategy-3-ris3-2026-to-2031>



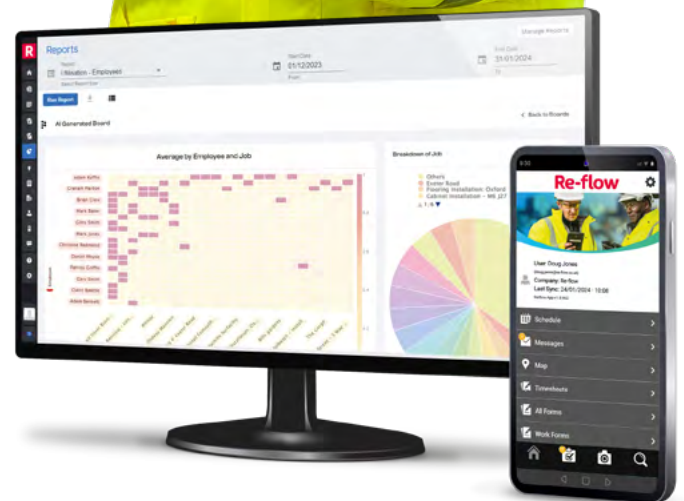
9 About us

Re flow Field Management's⁵³ operations platform serves contractors delivering work on live networks, under pressure, and across dispersed teams. We understand that safety depends on planning, visibility, and control managed consistently, day in day out across contracts.

Our software helps organisations:

- Plan work more effectively.
- Manage and ensure compliance.
- Capture accurate, real-time data from the field (inspections, briefs, incidents, and defects).
- Mitigate vehicle, plant, and workforce risk.
- Standardise processes.
- Turn data into evidence.

We give teams the tools to see what is happening on their sites and to act early where risk is building. Built directly to the needs of industry partners, Re-flow is a powerful operations tool for preventing harm, building efficiency, and raising standards across UK infrastructure.



Re-flow[®]
Field Management

⁵³ <https://re-flow.co.uk/>

**Re-flow provide field
management software
specialised for the
highways industry.**

Visit www.re-flow.co.uk

