

**Roadworkers** 2015  
Stepping up to the health and safety challenge

## Stepping up to the health and safety challenge

Representatives from leading construction and maintenance companies are putting the wheels in motion for a road workers' health and safety event. Planned for Autumn 2015, this will be a multi-organisation supported event led by the UK highways industry. The aim is to bring leading players together to discuss how to further reduce serious incidents to both the workforce on our roads and road users on the network.

The event will include a mix of government and non-government representatives to critically examine ways in which we can work closely together to collectively step up to the health and safety challenge. It will promote the successes celebrated by the industry so far, address current challenges and give delegates the chance to share best practice with colleagues from other organisations.

It is hoped that this will be the first of a series of events of this kind, where Industry leaders come together to show their commitment to improving the management of risk on our roads.

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## The motorway: life in the fast lane

Road worker safety has been under the spotlight as part of a new BBC documentary about life on the M6.



*The motorway: life in the fast lane* takes an unprecedented look at the often unseen and unappreciated workers who help keep one of the UK's busiest motorways running.

[Highways Agency staff](#) working on the M6, along with partners including Amey, Skanska, Central Motorway Policing Group (CMPG) and the Driver and Vehicle Standards Agency, were followed by film crews between November 2013 and March 2014.

The cameras caught several dangerous situations for road workers – including cars breaking a roadblock, lorries ploughing through cones around roadworks, and a very near miss, where an HGV skimmed just four inches past a traffic officer vehicle after ignoring traffic management measures.

The documentary started on September 9 and ran on Tuesdays at 21.00 on BBC 2. Episodes are currently available on [iPlayer](#).

The first episode aired just as the Highways Agency launched its post-summer [road worker safety campaign](#). The campaign included footage of near misses around roadworks – which have gained almost 30,000 views on [YouTube](#) so far.

Reaction to the show on [Twitter](#) has shown that many viewers have a new found appreciation for

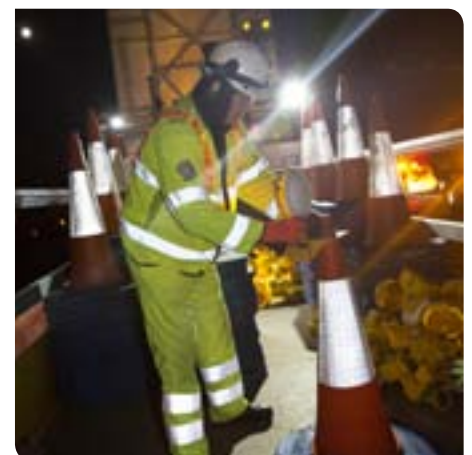
the work carried out by highways crews. Tweets have included praise for road crews who have to cross live carriageways, and for traffic officers, whose important role in managing incidents is often misunderstood.

Episode one, [weight of traffic](#), aired on 9 September and gained 2.42 million viewers. It included footage of litter pickers, road repair crews and staff working with residents.

Episode two, [keeping the show on the road](#), aired on 16 September and drew 2.4 million viewers. This episode looked at winter 2013/14, went out on the road with Amey's winter managers, and explained important work to preserve spaghetti junction for decades to come.

Episode three, [the need for speed](#), aired on 23 September, with 1.8 million viewers. This was by far the best-received episode on Twitter – with many saying they would never get angry at roadworks again. This included rolling road repairs, the work of CMPG, multi-agency response to road traffic collisions (RTCs) and a tragic suicide on the M6.

Episode four, [no such thing as an accident](#), on 30 September, focussed on Highways Agency work to improve Catthorpe junction in Leicestershire. Cameras also caught several RTCs on film. The title of the episode was taken from the words of a widow whose husband was killed on the M6 – by a lorry driver who'd failed to take a proper break.



**A project initiated by RoWSaF aims to reduce the incidence of injury to road workers from incursions.**

Road workers are acutely aware of the risk presented by vehicle incursions. Between 1 April 2013 and 31 March 2014 the Highways Agency's supply chain partners recorded six Health and Safety Executive reportable injuries (RIDDORs), three lost time injuries and over one hundred high potential near misses resulting from incursions – making incursions one of the most significant risks to road workers.

Further data identified that between January and May 2014, 199 incursions involved 330 vehicles. This evidence led RoWSaF to initiate a

programme of work to drive down the incidence of incursions. A key aim is to publish guidance on current best practice, and to consider broad ranging action to mitigate incursions, including driver education, improved enforcement, innovations such as better use of technology, and improved monitoring of incidents. A working group made up of traffic management contractors, highways contractors, designers and the Highways Agency will publish an initial report to RoWSaF in the Autumn 2014.

What's evident is that incursions present a huge challenge and will require a concerted,

collaborative effort to make a tangible difference. A corresponding level of resource, programme sponsorship and on-going detailed review of our performance data will be essential to achieve success. It is anticipated that this project, initiated by RoWSaF, will be the catalyst for this change.

If you'd like an update on the status of the project, or to get involved in delivering or being consulted on the project's outputs please get in contact with the project manager, Nick Balsdon.

[nick.balsdon@highways.gsi.gov.uk](mailto:nick.balsdon@highways.gsi.gov.uk) or telephone 07834 770871.

## The latest from RoWSaF

### New challenge for the delivery of zero carriageway crossings

The target to eliminate road worker carriageway crossings on foot has been brought forward (from December 2016) to December 2014, setting a challenging target on the delivery of projects. This target is well on the way to being delivered, with offside signs removal (via both interim advice and monitored roll-outs) being able to remove over 75 per cent of all carriageway crossings.

The Highways Agency is currently in discussion with the Department for Transport about issues relating to signs authorisation to enable the progress of two projects seen as critical to achieving the target and eliminating the last few operational practices that require carriageway crossings.

### Published interim advice notes (IANs)

**IAN180/14:** This guidance is designed to assist designers and service providers in their selection of the most appropriate type of remote controlled temporary traffic management sign for use during road works. It sets out the pros and cons of the types of sign currently available in order to best inform that choice.

**IAN179/14:** This provides guidance on using vehicle mounted high level variable message signs to provide advance warning of lane closures for relaxation works on dual carriageways with a hard shoulder. This alternative to the use of fixed plate signs on A frames at ground level allows the use of three high level sign vehicles in place of the five advance signs provided on the approach to road works on dual carriageways with a hard shoulder.

**IAN 150/14 revision 1:** This is the fourth iteration of IAN150, but of significance, it is the first to extend the offside signs removal technique to direct offside lane closures. It enables one or two lane offside closures on a three lane carriageway, subject to risk assessment.

We are asking service providers to provide feedback on their operational experience of using the new layouts.

### Coming soon

**IAN 181/14:** Guidance on the use of Impact protection vehicles for temporary traffic management.

**IAN 69/14:** Designing for maintenance. IAN 69/05 provided guidance for designers in support of their CDM duties to minimise health and safety risks during the maintenance of our assets. This has been updated in IAN 69/14 to comply with the EU construction product directive and provide more guidance in support of our repair and maintenance strategy statements required during the development of new schemes.

**Revisions to IAN 150/14:** To extend offside lane closures on three lane and four lane motorways, and also for use on all purpose trunk roads and two lane motorways.

**Use of MS4 VMS signs:** To warn of roadworks lane closures; and the use of gantry AMI signalling for temporary speed limit signing at road works. These techniques will be used for routine roadworks on smart motorways before they are rolled out for wider application on the network.

**Removal of road danger lamps:** Trials are due to complete by the end of December and final recommendations presented by the end of January 2015, which will then be published as interim advice. Based on the first set of trials completed, the outcome is looking positive that in some circumstances road danger lamps will be able to be removed.

### Identifying the top risks to road workers

RoWSaF has undertaken a piece of work to determine the top risks to road workers, based on the experience of the industry. This work will inform RoWSaF's strategy going forward. It will be no surprise to hear that the top two risks were confirmed as crossing live carriageways when setting out TM, setting out signs or installing lead-in zones; and incursions into works by breaches of the cone line, temporary barrier strikes, accidental 'follow ins' or unauthorised deliberate entry.

Other key areas are also emerging and a full report will be made in the next issue of RoWSaFnews.



## A-one+ Joint Venture area 12 celebrates 2 million working hours RIDDOR free

**Safety focussed initiatives, improved engagement and a change in culture have all been major factors that have contributed to the successful achievement of 2m hours RIDDOR free in Area 12.**

Area 12 is one of the largest and busiest road networks in the UK comprising 494km of motorways and trunk roads, and over 1,400 structures. The sites are huge (500km long in the case of Area 12) with multiple interfaces with road users and high speed traffic. In Area 12, more than 300 schemes are delivered each year, as well as numerous maintenance interventions all carrying risk that is proactively managed.

The end of June 2014 saw Area 12 celebrate a landmark achievement in working over 2 million hours without a Reportable Injury, Disease or Dangerous Occurrence (RIDDOR).

Andy Jamieson, Managing Director for A-one+ commented "This can only be achieved through engagement and having the right culture by all involved on the project, including the supply chain, and with full commitment of the Highways Agency as client".

Their success has led to several national industry recognised awards including a highly commended Prince Michael International Road Safety Award for outstanding contribution to road safety in December 2012 and, for a third year running, outright winner of a CIHT road safety or health and safety award in June 2014, with their no strike IPV awareness, for work with the freight industry.

Andrew Sharp, A-one+ Programme Delivery Manager in Area 12 is leading the no strikes project and said "With the buy in of major freight companies we should reach over 30,000 professional drivers with our training, helping to keep our road workers safer in the future."

A-one+ has also embarked on a programme to understand the consequences that drive inappropriate behaviours and they have invested in a very strict policy of drugs and alcohol testing, preventing individuals who may be a risk to themselves or others from working on the strategic road network.

## Respect our road workers

**CCTV footage shows reckless driving at roadworks.**

Shocking footage released recently shows the risk faced by people working to improve or maintain England's motorways and major A roads.

The video clips feature two examples of workers narrowly escaping serious injury when inattentive drivers ignore signs on the road and do not slow down. The footage has been produced as new figures show that last year saw the highest number of serious injuries among incident response teams since 2007, with 10 road workers suffering major injuries.

**The incidents are:**

- A [lorry almost crashing into a Highways Agency traffic officer vehicle](#) which was attending a breakdown on the M6 near Birmingham. This was despite a red X being displayed on the overhead gantry to show the lane was closed.
- A [lorry continuing in a lane where a red X has been displayed](#) on an overhead gantry and then crashing through the traffic cones protecting a maintenance crew.

Roads minister John Hayes said: "The safety of those who work around the clock to carry out vital improvements and keep drivers moving after incidents is absolutely paramount. It's not worth putting road workers' lives at risk, let alone the tragic impact on their lives and those of their families, simply to shave a few seconds off your journey."

**The Highways Agency's advice for driving safely at roadworks is simple:**

- Keep within the speed limit – it is there for your safety
- Get into the correct lane in good time – don't keep switching
- Concentrate on the road ahead, not the roadworks
- Be alert for works traffic leaving or entering roadworks
- Keep a safe distance – there could be queues in front
- Observe all signs – they are there to help you

## Reducing road worker risk by removing signage in the central reservation

**Connect Plus Services has played a significant role in pioneering a new method of managing traffic approaching roadworks, which could save workers lives.**

Working with RoWSaF and funding research by the Transport Research Laboratory (TRL), Connect Plus was able to prove that with improved overhead electronic signage and nearside signage, central reservation signs are no longer necessary to encourage traffic to slow down when approaching roadworks.

Trialled on the M25 during 2013 and approved for use by the Highways Agency last month, the new method is a major contributor to the Agency's aim to eliminate all live carriageway crossings by road workers by December 2014.

The method was piloted and implemented extensively over a two year period by Connect Plus Services, (a joint venture partnership between Balfour Beatty, Atkins and Egis Roads SA), with support from Balfour Beatty Mott MacDonald. The trial carried out on over 1,000 kilometres of the network involved the incremental removal of central reservation signage.

Connect Plus has briefed all their traffic management crews, depot managers, supervisors and operatives with the new standard. To put it into context, it is estimated that this will avoid around 750,000 carriageway crossings each year for their traffic management operatives.



## BAM Morgan Sindall – ten steps to zero exposure

**BAM Morgan Sindall wins health and safety award at the Constructing Excellence in Yorkshire and Humber award ceremony.**

Bam Morgan Sindall received several awards in 2013 for their five point plan to deliver zero carriageway crossings. They have now extended their achievements through the success of their M1 junctions 39 to 42 smart motorways project in Wakefield.

Their ten steps towards zero exposure strategy was set up to eliminate fatalities, serious injuries, and long-term ill health to road workers maintaining the network. By eliminating carriageway crossings they achieved this with last year's winning submission, the five point plan for the M62. They are now showing continued drive and commitment to proactively enhance their safety performance, working toward the next goal of eliminating the need for workers to be on the live carriageway by 2016. They are extending their winning strategy with a further five steps to eliminate road worker exposure from road users.

### **Their extended strategy consists of five additional steps:**

- No cones – in taper and chicane zones, replaced by adapted temporary vehicle restraint (varioguard).
- Educating road users.



- No cones – line markings replacing traditional areas for cones in splitter islands and slip road nosings.
- Intellicone – detecting through laser any intrusion or breach by the road user or emergency services into a possession area.
- A zero exposure traffic management pack – helping the workforce to understand the main risks and the mitigation that can be taken to avoid being exposed to traffic.

Dave Todd, Senior Operations Manager at Bam Morgan Sindall said "We pioneered the first major project in the country using five steps to eliminate both planned and reactive carriageway crossings. The ten steps towards zero exposure strategy will go a long way toward achieving the Highways Agency's goal to eliminate the need for workers to be on the live carriageway by 2016. We are very proud to be recognised for these achievements."

## Abuse to road workers

**A road workers' workplace is amongst one of the most dangerous and vulnerable places to be. Not only do oncoming vehicles pose a threat to road workers, but the behaviour of drivers in passing vehicles is a growing problem.**

A survey released by the RAC Foundation in 2007 found that 80 per cent of road workers have been physically or verbally abused by motorists and that 40 per cent are abused on either a daily or weekly basis. This can be from thrown missiles (often food and bottles), verbal abuse, and personal injury caused by road users' vehicles.

The HTMA continues to work hard to raise awareness of the work road maintenance workers carry out in order to change the public's perception and behaviour towards them. They have set up a sub group to provide guidance on road worker abuse.

The Highways Agency is also reviewing its best practice guidance around reporting threatening behaviour to the police and will expand this to cover recent innovations such as the use of personal body cameras.

# Yorkshire media event highlights road worker safety



## Roadworker safety was the focus of a recent media event at the A-one+ Area 12 Tingley depot in West Yorkshire.

Seven different media partners including regional BBC news teams joined the Highways Agency and road workers from A-one+ to highlight how dangerous working on the strategic road network is, focussing on the verbal and physical abuse that operatives can face and what is being done to tackle these issues.

## The event showcased three innovations that have been developed to improve road worker safety:

- The intellicone wireless sensor network that turns ordinary traffic cones into an electronic perimeter which detects breaches and activates an audio-visual alarm to warn road workers that a vehicle has entered a closure.

- The simplified traffic management layout that has significantly reduced the number of signs set out in advance of roadworks, and has now been used over 22,000 times by A-one+ saving over three quarter of a million road crossings by road workers.
- Impact protection vehicles with 360 degree camera systems which are making use of emerging technology to trigger alarms if a road user is approaching a stationary IPV in a live lane.

The event used recorded CCTV footage from on board an IPV showing the impact when an HGV collided with the back of the IPV placing road workers and road users lives in danger.

Widespread use of this footage on regional news and local media web sites has helped increase driver awareness of the dangers faced by road workers.

<http://www.youtube.com/watch?v=q96fzeguyas>

aimingforzero

## All systems go for health, safety and wellbeing week

The Highways Agency's health, safety and wellbeing week will run concurrently with European health and safety week in the third week of October. The week will be shaped around the theme for European week for safety and health at work, which is healthy workplaces manage stress.

The Agency's delivery partners are busy putting their own plans in place and will also join with the Highways Agency to deliver sessions in Agency locations across the country. Whilst the core theme provides a focus on wellbeing and stress management, the Highways Agency's activities will broaden to encompass wider health and wellbeing issues.

### To give a flavour of planned activities by supply chain partners:

- BAM Nuttall Limited is holding a company worldwide safety day on 21 October focusing on the 'big five' safety risks which are the main causes of many serious accidents - working at height, working with moving equipment, lifting and hoisting operations, electric installations, cables or pipes, and working near risk zones, such as water and traffic.
- Costain is planning an interactive health kiosk at junctions 28 to 31 of the M1 during the week. Their kiosks form a pivotal engagement with staff, allowing them to check and track their vital signs of health, encouraging a positive shift in people's awareness of their own wellbeing.
- EM Highways are running a poster campaign during the week focusing on issues such as driver fatigue; sleep apnoea (which affects the way you breathe when you are sleeping); adequate hydration; and healthy company car drivers.



Other delivery partners plan to use the British Heart Foundation to deliver health, wellbeing and lifestyle events. More information can be found at <http://www.bhf.org.uk/HealthAtWork/resources-and-events/health-and-wellbeing-days.aspx>

Let us know about your planned events at [info@rowsaf.org.uk](mailto:info@rowsaf.org.uk)

## Delivery Hub update

The Delivery Hub health and safety team raising the bar guidance on temporary barriers has been revised setting minimum requirements based on current best practice. The document builds on the published temporary barrier decision tool and sets the expectation that a temporary barrier system will be used if major project works are in excess of 28 days. The guidance also covers selection of barrier ends, risk assessing soft verges and the use of barriers on recently laid surfacing.

Find out more about The Hub's publications at:

<http://www.highways.gov.uk/our-road-network/safety/major-projects-delivery-hub-health-safety-action-group/>

## Children's day at Newry based Mobile Variable Message Signs Ltd helps to heighten awareness of road worker safety

The team wanted to communicate how one high speed accident through road works doesn't just take the life of the road worker; it destroys the lives of co-workers and family members also.

Through their children's day, they promoted the Highways Agency's [respect our road workers](#) campaign that delivers a succinct and powerful series of messages to the driving public. At 70mph it takes 13 seconds to drive ¼ mile and at 50mph it takes 18 seconds to cover the same distance. That's only five seconds slower but the impact is huge and this reduction could prevent a serious injury or fatality to a road worker.



## Revision of CIS53 – crossing high-speed roads on foot during temporary traffic-management works

Construction Information Sheet 53 (CIS53) was produced by the Health and Safety Executive in collaboration with the traffic management industry.

It set out points to consider when planning traffic management operations and introduced principles that have been embedded across industry and incorporated into Chapter 8.

The Health and Safety Executive has been working on a revision of CIS53 to bring it up to date to reflect current good practice and relevant guidance in traffic management. The intention

is to broaden the scope of the information sheet to cover traffic management operations beyond high-speed dual carriageways.

Progress has been delayed to allow for a final consultation and recent developments such as the HTMA guidance and Highways Agency guidance for the use of impact protection vehicles. Tom Merry, HM Inspector of Health and Safety at the Health and Safety Executive, is currently working on the final draft to be approved for publication. Keep an eye on RoWSaFnews and the RoWSaF web site for publication details.

### Seeing is believing 19 and 20 November 2014

RoWSaF will have a platform to talk about road worker safety at the Seeing is Believing event in November. Roads Minister Robert Goodwill will open the event, which will provide a great opportunity for local authorities to find out about the latest developments and products that can help improve the safety of the highway network.

TMCA will demonstrate the installation and removal of a nearside lane closure and offside lane closure of a motorway with zero carriageway crossings. This will be recorded and used as a training video for the TMCA. Find out more at [www.sib.uk.net](http://www.sib.uk.net)

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## Fletton Parkway scheme trials a personal safety alert system

In a bid to try to eliminate people and plant interface risks wherever possible, project manager Chris Strumidlo has invested in a high-tech system for his entire project team to trial.



Fletton Parkway is a £12 million dual-carriageway widening scheme to add a third lane in both directions between junction 17 of the A1 and junction 2 of the A1139, near Peterborough.

The my zone system uses transmitters situated on moving plant and vehicles which emit a signal to paired receivers within a certain radius around the site vehicle and machines. The signal is picked up by the portable receivers which are mounted in each operative's helmet. A buzzer sounds to warn the wearer that they have entered a plant exclusion zone.

The system is used as a secondary safety measure to enhance the physical exclusion zones already set out. It is not intended to replace these.

At Fletton Parkway, the buzzers have been supplied to all operatives and transmitters fitted to seven pieces of the largest plant to get the maximum benefit against investment.

As Chris Strumidlo explains, they have had to balance the high cost of the system with the potential life-saving benefits and the overall value of the scheme. As prices come down and technology improves, Chris believes that systems like this could eventually become standard across Balfour Beatty's sites.

## About us

The Road Workers' Safety Forum (RoWSaF) is an industry group established in 2001, promoting the health, safety and welfare of road workers. Members are drawn from UK roads administrations, enforcement agencies, contractors, designers and their associations.

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## Contact us

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Highways Agency publications code PR64/14  
Highways Agency Creative Team Bedford S140485