Why it will take a collaborative effort to help reduce the number of bridge strikes in the UK



It will take a collaborative effort from all those responsible for managing the road and rail networks as well as those who use them, to reduce the amount of bridge strikes that happen across the UK every year.

These are the thoughts of Richard Bevins, Managing Director of Coeval, who said continuing the search for solutions to help reduce the amount of strikes every year was vital to help increase levels of safety and awareness as well as reduce the amount of costs and delays.

"Our experience from regularly talking to local authorities, and other road and rail organisations is that despite all the good work that Network Rail, local authorities and other road organisations have put into raising awareness, as well as solutions that have been developed such as our Overhead Vehicle Detection (OVD) systems, there sadly isn't one answer to the problem. It will take a continued combined effort across the whole road and rail sector including by those who use the network, to get closer to solving this problem that puts road users and road workers at risk as well as costs totalling millions of pounds every year," Mr Bevins said.

Bridges strikes not only place the people directly and indirectly involved in them at risk, they are also a costly problem. According to Network Rail, in 2019/20 there were 1720 bridge strikes that were reported a reduction of 11.3% from the previous year but still amounting to five every day. Of these strikes, 328 locations received multiple strikes and the most expensive single strike amounted to £1.8 million in train delay costs recently. Bridge strikes involving buses remain a concern for Network Rail with a steady increase over the last 10 years.

Most of the vehicles that hit railway bridges are Heavy Goods Vehicles (HGVs) as well as buses, at a cost of around £13,000 per strike –costing the UK taxpayer around £23m in a year, said Network Rail.

Network Rail research has shown 43% of lorry drivers admit to not measuring their vehicle before heading out on the road, and 52% admit to not taking low bridges into account.



Above: Bridge Strike – Milngavie, Glasgow, Scotland – 10th June, 2016

Coeval's, Overhead Vehicle Detection (OVD) systems can alert drivers to a low bridge ahead and warn them that they are too tall to pass under it. It can also collect data in relation to the number of triggers and help to identify if there is a wider issue that needs investigating further.

Network Rail has launched a campaign to help spread awareness of the growing problem. Its haulage partners have played a vital role in helping us shape our content and evaluate the effectiveness of the campaign through surveys with their employees, providing valuable feedback directly from drivers.

The organisation also has a network of bridge strike 'champions' covering each route across Britain, who raise awareness of the issue by visiting logistics companies and lead on managing the risk of bridge strikes locally.

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Recent landmark legal cases mean Network Rail can now claim back from hauliers the huge costs incurred by bridge strikes – and it is aiming to claim back 100%. "Until these legal successes, we've been paying for repairs and compensating train operating companies for delays to their services where we haven't been able

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to claim – costing the taxpayer. A number of bridge strikes are 'hit and run', so while we can claim back some costs, we still have to find the rest," it said.

Network Rail works with a number of partner organisations to help achieve this including; Highways England, the Traffic Commissioners, DVSA, BTP and the Home Office, TfL, RHA and various commercial partners such as Eddie Stobart, Tesco, Asda, DHL, as well and Royal Mail, UK Mail, DPD Group and Kuehne and Nagel, Wincanton and Maritimejk.

Sir Peter Hendy CBE, chair of Network Rail, said: "We've had a number of encouraging, productive conversations with industry partners who are keen to work with us to offer improved support and education for drivers, and we will continue to engage with key players in the industry to reduce the risk of bridge strikes. But we also have to support action against vocational licence holders where they do not honour their obligations to operate safely".

The Bridge Strike Prevention Group (BSPG), part of the UK Network Management Board, seeks to influence the management of all bridges over roads in Great Britain so the risk of vehicular strikes is as low as reasonably practicable and the safety and reliability of both the road and rail networks is maintained.

Through its activities the Group seeks to help drive policy and promote changes in legislation to reduce the risk of bridge strikes, monitor the size and trends of the hazard of bridge strikes, and identify areas where the risk is increasing, as well as support the development of cost effective measures for the prevention and mitigation of bridge strikes, and monitor their effectiveness.

It Chair, Mark Wheel, Senior Engineer (Structures) & National Bridge Strike Champion at Network Rail said: "Network Rail remain committed to reducing the frequency of Bridge Strike events. We have yet to fully analyse the impact of Covid 19. However early indication shows that although numbers initially dropped, they are slowing creeping up again."



PROJECT EXAMPLE - CITY OF EDINBURGH COUNCIL

PROBLEM: 4 hotspot bridge sites with a high number of bridge strikes and obsolete/faulty OVD systems.

SOLUTION: Replacement of 15 systems across 4 very busy sites with swift delivery during temporary road closures to minimise road traffic delays and avoid disruption to the Edinburgh Fringe.

TECHNOLOGY: Coeval supplied dual infrared overhead broken beam detectors on each approach to the low bridges, detecting any vehicles exceeding the maximum vehicle height. Should a vehicle break the detection beam, Vehicle Activated Hazard Warning Signs are activated to warn of the height restriction ahead, and the Warning Signs advise to use an alternative route e.g. 'Overheight Vehicle Use A701 to Left' or 'Overheight Vehicle Stop' if no alternative exists before the bridge.

George King , Project Manager for The City of Edinburgh Council said: "Coeval won the tender for the replacement systems and carried out the installation works involving using different temporary traffic management set-ups to liaising and working with our own electrical consultants in the Street Lighting Section. The work was also completed within programme and budget. We are now satisfied that the new systems will help protect the bridges for several years to come."

Speak to our experts, contact us today on 0141 255 0840

ABOUT US

Coeval delivers infrastructure technology that advises, informs and influences road users to help create a safer environment for us all. Visit our website to see our wider solution offering.

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