2017 SPEED SUMMIT

A report on effective schemes

Save Lives

#SlowDown

Prince Michael INTERNATIONAL ROAD SAFETY AWARDS
Recognising achievement and innovations which will improve road safety

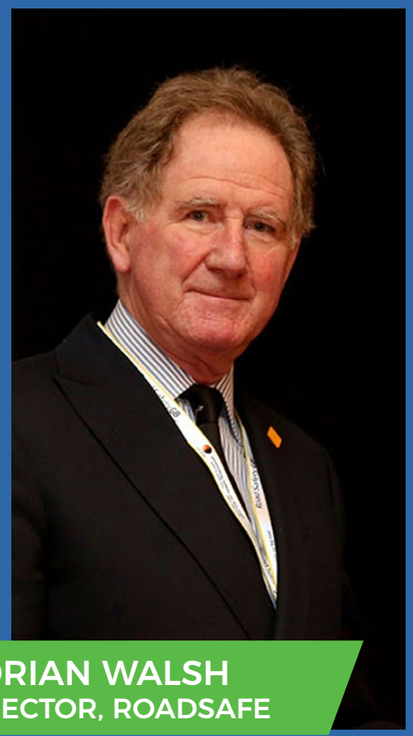
ROADSAFE®

PACTS
Parliamentary Advisory Council for Transport Safety

FOREWORD

This report was compiled following a summit held during Global Road Safety Week 2017 to review some successful measures which have addressed speed and what has been done to address this key risk factor.

As one of a series of London events and as our contribution to improving international understanding of effective countermeasures RoadSafe, in collaboration with PACTS, the Parliamentary Advisory Council for Transport Safety, we held a Speed Summit, featuring an analysis of the continuing effectiveness of some Prince Michael International Award winners. Their success which is reviewed here should be an inspiration to others.



ADRIAN WALSH
DIRECTOR, ROADSAFE

THE SAFE SYSTEM APPROACH

To be effective, any country's road safety strategy needs to be established on strong conceptual foundations. The Safe System approach is now widely recognised as a coherent and integrated framework for road injury prevention that is relevant to all countries.

Its starting point is an ethically inspired perspective that there is no acceptable level of road deaths and serious injuries, and that road users respecting the rules of their road networks have a right to expect that they should be safe. Our intrinsic human vulnerabilities are at the centre of the Safe System approach and from this flow a circle of protective interventions

The four guiding general principles of the Safe System approach are:

- people make mistakes that can lead to road traffic crashes;
- the human body has a known, limited physical ability to tolerate crash forces before harm occurs;
- individuals have a responsibility to act with care and within traffic laws, but a shared responsibility exists with those who design, build, manage and use roads and vehicles to prevent crashes resulting in serious injury or death and to provide post-crash care; and
- in order to multiply their effects, all parts of the system must be strengthened in combination, and road users are still protected if one part fails.

Guidance on the implementation of the Safe System approach is available in the OECD/ International Transport Forum's (ITF) recent report 'Zero Road Deaths and Serious Injuries: Leading a Paradigm Shift to a Safe System'. It recommends that priority be given to policies and measures that achieve the fundamental goal of limiting
crash forces to levels that do not exceed those that will cause serious injury or death. This requires a combination of measures to prevent dangerous behaviours and ensure
the use of safe vehicles on safe roads.

It highlights speed management as a critical overall policy instrument where avoiding any impact above 30 km/h is a critical life-saving requirement. This is because an adult pedestrian has less than a 20% chance of dying if struck by a car at 50 km/h but almost a 60% risk of being killed at 80 km/h. In high-income countries, speed contributes to about a third of deaths on the roads. This increases to nearly half in low and middle-income countries. And yet, a 5% decrease in average speeds can result in a 30% reduction in the number of fatal road crashes.

From the perspective of vulnerable road users, who account for nearly half of all road fatalities, it becomes clear why speed management lies at the heart of the Safe System approach. This could not be more powerfully the case when it comes to protecting the most vulnerable of all, our children. Every day around the world, approximately 3000 children and adolescents are killed or seriously injured in road crashes. No one could possibly argue that children are responsible for this appalling tragedy and so it must be the duty of governments and the wider community to make roads safe for children.

- **30% of serious crashes are caused by deliberate violations and risk-taking behaviour**
- **The majority result from simple errors of perception or judgement by otherwise compliant persons**

'An approach that humans can be faultless road users is flawed and at odds with safety management in other transport modes such as aviation or shipping or rail, where behaviour is encouraged and guided through system design.'

OECD Towards Zero...2-16

A prime example of this approach is the Safe Routes to School project of the Global Initiative for Child Health and Mobility which promotes the vision that every child will have a safe and healthy journey to and from school by 2030. This highly focused campaign is obviously designed to protect children, but its practical impact would benefit the entire community. Because if road networks are all designed, built, and managed with child safety as a priority then it is certain that they will be safe for everyone.

There are some distinct features of the Safe System approach that make it a powerful framework for sustained and effective road injury prevention. It rejects the view that road deaths and injuries are an inevitable price that must be paid for a highly motorised mobility system and challenges the public's frequently poor perception of risk. It avoids default to primary reliance on behavioural measures which was the tried and failed policy in some high-income countries in the 1950s and 1960s. Their attempts to eliminate human error by driver education eventually gave way to a more holistic strategy promoting a combination of stronger enforcement supported by public awareness campaigns, safer road design, and improved vehicles and vehicle technologies. This more effective strategy has helped to 'hard wire' safety into vehicles and road infrastructure rather than just pursue the impossible task of eliminating all human error on our roads.

The Safe System also embraces a performance dynamic that tries to ensure that all policy instruments are fully utilised. It encourages improvements in the 'supply side' of safety by promoting technological innovation, and it stimulates the 'demand side' by constantly identifying performance failures across the road transport system. In this way, the Safe System approach serves as a permanent stimulus or 'nudge' to those responsible for road safety – the system managers – to think ambitiously and challenge their own and public perceptions about what can be achieved. An important consequence is that all casualty reduction targets are intermediate, in the sense that their achievement is not regarded as a total success but rather a reason for reassessment and renewal. This prevents any target becoming a measure of an 'acceptable' level of fatality.

The Safe System approach is gaining momentum around the world, at a national level, and beyond that, to major cities. In this report, we see the approach applied by Transport for London.

If a 5 per cent reduction in average speed can result in a 30 per cent reduction in the number of fatal traffic crashes, it is hard to think of any other low-cost intervention that could deliver such a potentially huge reduction in human suffering and economic loss globally. We have the tools available to us to help manage kinetic energy in the system and managing speed is one of the clearest ways that advances in road safety can be demonstrated.

Countries successfully reducing road traffic deaths have done so by prioritising safety when managing speed. Among the proven strategies to address speed include:

- Building or modifying roads to include features that calm traffic
- Establishing speed limits to the function of each road
- Enforcing speed limits
- Installing in-vehicle technologies
- Raising awareness about the dangers of speeding.

Here, with the expertise of Prince Michael International Award winners, we explore what is currently being achieved, some popular myths, and where we can go next.

COMMENTARY

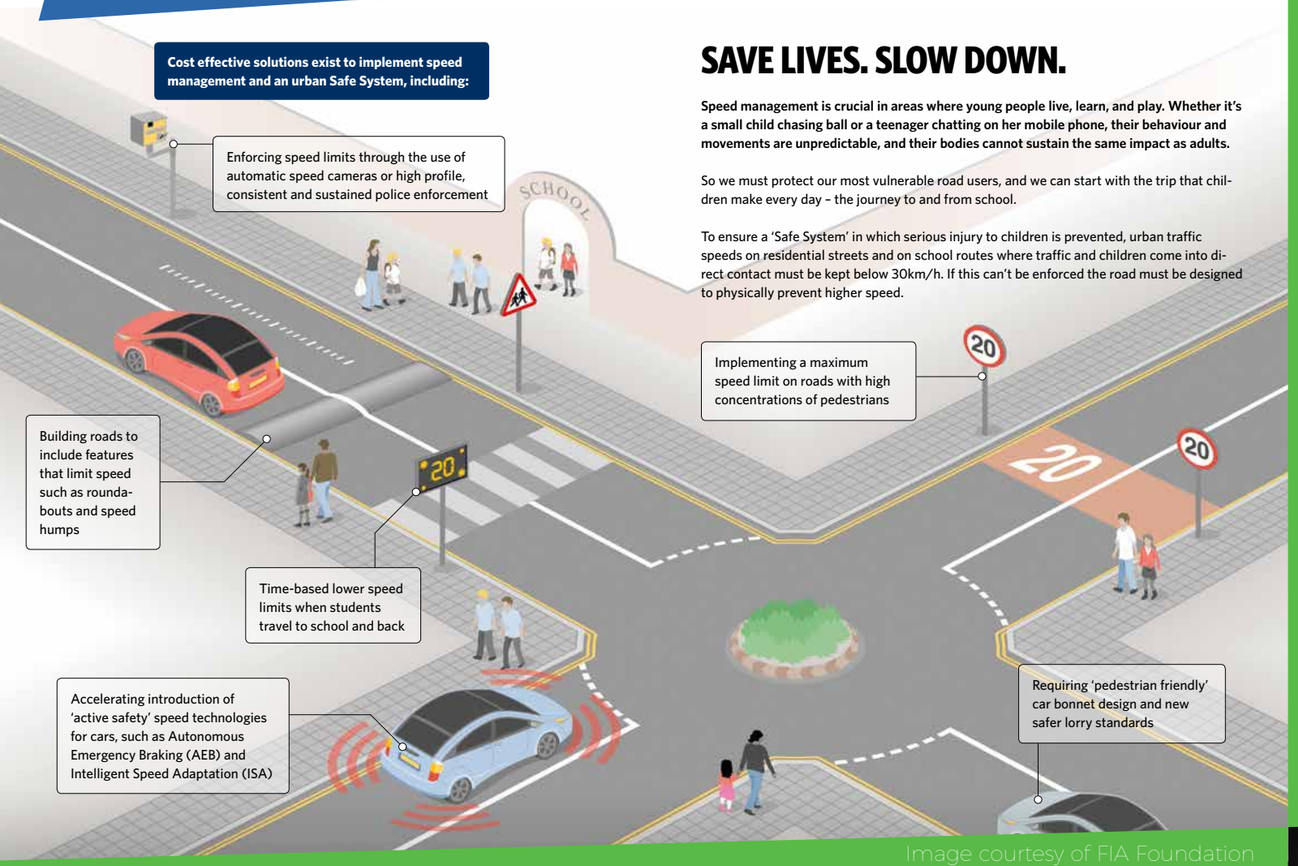


Image courtesy of FIA Foundation

SAVE LIVES. SLOW DOWN.

Speed management is crucial in areas where young people live, learn, and play. Whether it's a small child chasing ball or a teenager chatting on her mobile phone, their behaviour and movements are unpredictable, and their bodies cannot sustain the same impact as adults.

So we must protect our most vulnerable road users, and we can start with the trip that children make every day – the journey to and from school.

To ensure a 'Safe System' in which serious injury to children is prevented, urban traffic speeds on residential streets and on school routes where traffic and children come into direct contact must be kept below 30km/h. If this can't be enforced the road must be designed to physically prevent higher speed.

PACTS welcomes the focus on speed for Global Road Safety Week 2017. We are pleased to collaborate with RoadSafe on this Speed Summit which brings together experts from a range of disciplines and backgrounds who understand the role of effective speed management in reducing road casualties.

Speed is a major factor in collision causation and severity of outcome. Inappropriate speed makes collisions more likely while higher speed makes the consequences more severe.

Police road collision data (Stats19) for Great Britain show inappropriate or excessive speed to be two of the contributory factors most often recorded by the police. In-depth studies have concluded that the true level may be three times higher.
When confronted by difficult or dangerous situations, speed is the variable that road users normally adjust to cope with the task.

The risk of a pedestrian being killed if hit by the front of a car is estimated to be approximately 1 per cent at an impact speed of 20 mph, 7 per cent at 30 mph and 31 per cent at 40 mph. The risk is similar for a child pedestrian as it is for an adult pedestrian, but the risk is higher for elderly pedestrians.

DAVID DAVIES
EXECUTIVE DIRECTOR, PACTS

59% of all GB fatalities occur on country roads where limits are typically 60mph. Inappropriate rather than illegal speed leading to loss of control is usually the problem. On lower speed urban roads, pedestrians and cyclists are more likely to be the injured party. Small changes in mean speeds can result in disproportionate changes in casualties. A 1mph reduction typically results in a 6% decrease in accidents.
But knowing that speed matters is not enough. The challenge for politicians and road safety professionals is to find interventions that are acceptable, affordable and effective. Popular is not necessarily effective; and interventions initially unpopular can sometimes prove highly effective.

Average speed cameras seem to tick all the right boxes. Why should they not be used much more widely on higher speed roads? On urban roads, physical and psychological traffic calming measures have proved their worth. But there is resistance to more speed humps. Cameras and police enforcement in residential streets are generally not a feasible, scalable proposition. 20mph limits (signs only) have been more widely implemented recently. A DfT study on the effects of 20mph limits, to be published later in 2017, should provide authoritative data on changes in speeds and casualties. Road safety information, publicity and educational interventions also have their part to play. Ironically, it may be vehicle technology – such as Intelligent Speed Adaptation and vehicle autonomy - that make speed limits effective.

As this Summit shows, the UK has great expertise in these matters. In the post-Brexit world we must continue to learn, to develop new products and to share them internationally to achieve the global sustainable development goals for road safety.

THE EVIDENCE

Setting maximum permissible vehicle speeds, which may vary by vehicle and road classification, is undertaken by almost every country in the world. There is a wealth of scientific evidence that tells us the role speed plays in increasing the frequency of collisions and severity of injuries. Regulating vehicles speeds is therefore one of the most effective tools to achieve a safe system.

Deciding an appropriate limit has traditionally been carried out using traffic surveys with the average free-flowing speed used to determine the limit. For example, if the average speed on a road was 38 miles per hour then a 40 mph limit would normally be deemed acceptable. Changes to DfT guidance and the launch of a speed limit appraisal tool in 2013 uses much more information to help guide authorities in the setting of speed limits on specific roads.

Setting limits and the installation of signs does not however achieve instant compliance among road users. Speed limits need to be credible and self-explaining and there are many examples of roads around the country where this is not the case. The most effective limits are those backed by engineering measures which either physically restrict speeds or make it very uncomfortable to exceed them.

One of the best examples of compliance with new limits is seen in 20mph limits and zones.

RICHARD OWEN
ROAD SAFETY ANALYSIS

Although zones tend to have lower average speed to begin with, they achieve compliance and safety improvement with engineering and signing measures. 20mph limits however often see poor compliance and preliminary evidence from research into signed-only-limits suggests only a 0.7mph reduction in speeds.

Breaking limits is one problem but the issue of inappropriate speed is also a concern. An appropriate speed may change in the same stretch of road according to weather and road surface conditions, and on rural roads with higher limits bends pose a particular problem. Evidence from telematics systems seems to indicate that one of the best predictors for a driver's collision involvement is travelling at high speed on bends, rather than illegal speed on other circumstances. This evidence is very new however and has not been subject to scientific evaluation.

We know many of the effective solutions as far as engineering measures are concerned, and there is good evidence surrounding enforcement. We know that the DFT research into the effectiveness of NDORS courses is being undertaken and it is hoping to demonstrate a reduction in offending rates for course attendees. This will be essential in proving that education measures work to change drivers' behaviour. There is some evidence that flashing warning signs (VAS) work when warning of hazards but temporary speed indication devices (SID) only have an ephemeral effect.

EFFECTIVENESS OF SPEED CAMERAS

Higher vehicle speeds lead to an increased risk of collision, and an increased severity when a collision occurs.

While the arguments about the use of speed cameras continue to flare up from time-to-time, the best way to prove their effectiveness is for safety conscious highway authorities to be rigorous in capturing and publishing genuinely comparable data, whether for fixed sites, or increasingly for average speed cameras.

Our research is clear. Allowing for both natural variation and more general long-term downward trends in road casualty figures, fixed speed cameras – spot and average – prevent death and injury. The evidence is that 80 per cent of the public find speed cameras 'acceptable' or 'very acceptable'.

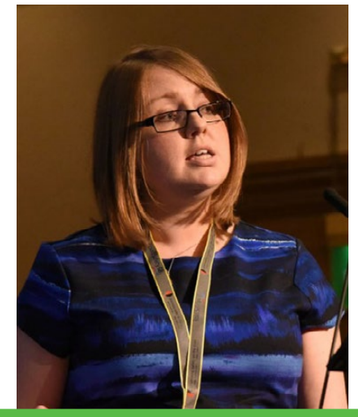
- **Average speed cameras cut the numbers of crashes resulting in death or serious injury by more than a third**
- **Fatal and serious collisions fell by 25-46%**
- **Personal injury collisions fell by 9-22%**

But there are two wider questions. Are the laws being enforced appropriate and has the advance of technology meant that we are now disproportionately focusing enforcement on too narrow a section of motoring regulation, while ignoring more serious and dangerous crimes?

Permanent average speed camera sites:
- **cost up to £1.5m per mile in 2000**
- **today - cost on average £100,000 per mile**

There has been a wide and enduring debate about the setting of speed limits. Strong cases have been made by loud voices for reducing limits in urban areas to 20mph while equally vociferous calls have been made by others to raise limits on motorways to 80mph. Many people see cases for a patchwork of limits that differ by geographical location. The Foundation has often argued against blanket changes to limits, preferring solutions based on local need. However, we recognise that a speed setting regime that appears to follow few principles could confuse drivers and lead to more convictions for relatively minor offences.

Government figures show that the number of dedicated traffic police officers has fallen sharply in recent years. In the absence of 'boots on the ground' it would be understandable if more reliance was placed on alternative – automatic – methods of enforcement. However, cameras do not identify drink- or drug-drivers, those who are on their mobile phones, those suffering from fatigue or those who lane hog, tailgate and weave in and out of traffic. We must resist the temptation to do things just because we can, and concentrate resources based on need, with automatic enforcement playing both an important and proportionate role.



ELIZABETH BOX
RAC FOUNDATION

NATIONAL ROADS: MANAGING SPEED

THE CASE FOR AVERAGE SPEED CAMERAS

At 273 miles, the A9 is Scotland's longest road, with a mix of dual and single carriageway, running from the Falkirk in central Scotland to Thurso in the far north, via Stirling, Bridge of Allan, Perth and Inverness.

Between 2008 and 2012, there were 58 deaths and 196 serious injuries following collisions.

Crashes on this road were not all attributed to speed. Other factors include: a high severity of collisions at junctions; crashes involving HGVs; loss of control; failing to look properly; failing to judge other's speed; careless or reckless driving. However, inappropriate speed is a factor, with

200 vehicles per day registered at speeds of 100mph or more.

The Scottish Government is committed to a £3 billion strategy to fully dual the A9 between Perth and Inverness by 2025. The A9 Safety Group, a collaboration of experienced representatives from public and private sectors, was established to improve safety on the route during this intervening period. The Group's 'Interim Safety Plan' comprising a mix of engineering, education and enforcement measures, developed from independent research, was designed to improve driver behaviour with the over-riding objective of reducing the number of people killed or seriously injured.

The result is the A9 SPECS3 Installation – Europe's longest enforcement project, covering 137 miles of average speed enforcement, and operational day and night for more than two years.

In "before" surveys for baseline monitoring, 55% of drivers admitted speeding and 38% admitted 10mph+ above limit.

Early data based on 18 months of monitoring indicates:

- *Fatalities down by 33%*
- *KSI casualties down 62%*
- *All injury casualties down 50%*
- *Speed reductions being maintained*
- *1 in 10 vehicles > limit – (vs 1 in 3)*
- *1 in 250 vehicles 10mph > – (vs 1 in 10)*
- *13 vehicles per day further actioned (0.03% of volume)*
- *43% fewer delay incidents*
- *Improved journey reliability (slight increase to total transit time)*
- *Average >5% traffic growth*
- *Journey time reliability remained consistent across the route*

GEOFF COLLINS
JENOPTIK

The Inverness Courier

Published: 02/09/2016 16:09 - Updated: 02/09/2016 16:11

Drop in deaths on A9 is 'extremely encouraging'

Written by Emma Crichton

NEW figures showing fewer deaths and accidents on the notorio have prompted Scotland's transport minister to claim the route since average speed cameras were installed.

Humza Yousaf welcomed the reductions but said more needs to done.

"Safety is an absolute priority and every road death is one too m he said.

"The latest A9 Safety Group figures indicate the route is much sa since the average speed cameras were introduced.

"This extremely encouraging picture is to be welcomed and I wo urge all A9 users, particularly the small minority who continue t risks, to play their part in reducing accidents as we progress our billion A9 dualling programme."

The latest information from the A9 Safety Group showed the nu of serious injuries and deaths between Perth and Inverness have dropped in an 18-month period since the average speed camera introduced.

There were seven fatal collisions in a period between when the cameras were switched on in October 2014 and April 2016, only slightly fewer than the 18-month average of 7.5 from 2011 until In total, there have been 39 collisions on the stretch since the ca have been operational, a drop of 34.5 per cent compared to the month average for 2011 to 2013. The accidents claimed the lives eight people, a drop from the 18-month average of 11 deaths fo to 2013.

Mike Burns, who runs the campaign group A9 Average Speed Ca

"Most of us were of the opinion that the cameras were wrong but I'm first to admit that maybe it was me that was unable to see the wood for the trees!"

PUBLIC ACCEPTABILITY

A repeat questionnaire from 2014 asked road users their opinion, with respondents reporting that they:

- felt less likely to exceed the speed limit
- 70% strongly agreeing or agreeing
- felt safer than if average speed cameras were not there
- 70% strongly agreeing or agreeing
- felt less likely to be involved in an accident
- 70% strongly agreeing or agreeing
- felt less pressured by following traffic
- 83% to 47% strongly agreeing or agreeing
- felt less likely to speed to make up time for stuck behind a slow moving vehicle
- 85% to 61% strongly agreeing or agreeing

A9 CASUALTIES BY SEVERITY AND YEAR

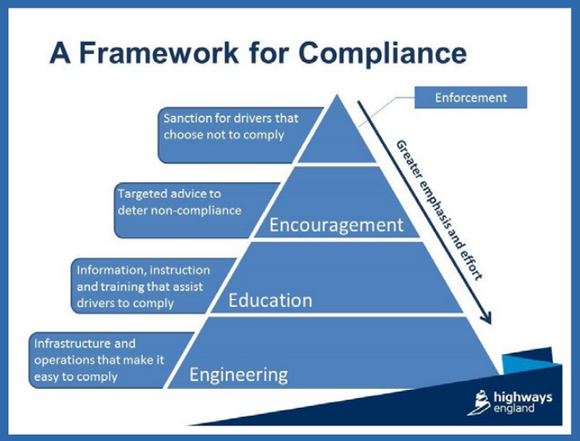
Year	Fatal	Serious	Slight	Total
2008	15	34	238	287
2009	7	55	276	338
2010	15	38	266	319
2011	13	36	196	245
2012	8	33	211	252
TOTAL	58	196	1187	1441

MANAGING SPEED AND COMPLIANCE ON THE NATIONAL NETWORK

JAMIE HASSALL
NATIONAL COMPLIANCE COORDINATOR
HIGHWAYS ENGLAND

Highways England aspires to a mile-a-minute network with zero injuries to those who use, work on or maintain it.

This is made difficult by the behaviour of a small minority of drivers, through their misuse of the network, failing to maintain their vehicle or being unfit to drive. These drivers do not believe the rules apply to them and Highways England has many examples of excessively high speeds being recorded and incidents that have ended in deaths due to speeding drivers.



The Department for Transport produces an annual report showing that in free-flowing conditions on motorways 46% of cars and light commercial vehicle exceed the speed limit and around 11% exceed the speed limit by more than 10mph. While the 120mph+ speeders grab the headlines, and they are high risk, numbers are mercifully low. The high volume of low-end speeders on the network might be individually low-risk, but when these are compounded with other factors such as weather conditions, distractions, impairment and vehicle condition, the result is the incidents and causalities seen daily on the network.

These figures have reduced slightly over time but still remain very high. Highways England is monitoring average vehicle speeds at peak times to help identify where there are capacity issues on the Strategic Road Network but it will also show where there are no capacity issues and so high average speeds are recorded. The data could be used at a local level to identify where and when any speeding takes place.

The greatest effort is spent on the ongoing process of getting the engineering right. Active media campaigns – allied closely with the DfT Think! campaign – help to increase driver knowledge and understanding. Enforcement is always seen as the last resort and should be used against those who fail to change their behaviour.

Highways England is currently developing a compliance monitoring tool for smart motorways using the current road side technology to establish a base line for compliance, monitoring this over time to inform new educational campaigns and target non-compliance.

Working in partnership with the DVSA, Essex police and a number of other forces, Highways England sends out warning letters to the registered keeper of vehicles identified driving on the hard shoulder when closed as a running lane. This has now been extended to cover vehicles going under a Red X and in the future could include other areas of non-compliance.

The letters include a link to a survey where Highways England seeks additional information to understand why the non-compliance occurred and likelihood of recurrence.

Results from the earlier trials have been positive and the compliance tools will continue to be used to monitor results.

INTELLIGENT SPEED ADAPTATION FOR SAFER ROADS AND SMOOTHER TRAFFIC IN LONDON

PETER SADLER, PRINCIPAL TECHNICAL SPECIALIST, TFL

The Mayor of London and Transport for London (TfL) published Safe Streets for London, a comprehensive plan for making the capital's roads safer. The initial target set was met early and was revised to reduce those killed and seriously injured in London by 50 per cent by 2020. Eighty per cent of all deaths and serious injuries on London's roads involve vulnerable road users – pedestrians, cyclists and motorcyclists.

Underlying the Safe Streets programme is a Vision Zero approach with the road safety pledge that 'no loss of life is inevitable or acceptable' which puts the elimination of road danger at the very heart of the transport system.

Key actions have included upgrading and improving the safety camera network, introducing 20mph trial routes on the TfL route network, and the trial of Intelligent Speed Assistance (ISA) technology fitted to buses.

The trials, the first in the UK, saw the technology, which prevents vehicles from accelerating over speed limits, fully tested on two bus routes that included a variety of road environments and differing speed limits.

All buses fitted with ISA remained within the speed limit 97-99 per cent of the time, proving the effectiveness of ISA. The extremely rare incidents of excess speeds were seen on downhill sections of road.

The trials were particularly effective when travelling through 20mph zones - which are being widely introduced and cover around a quarter of London's roads - helping to ensure other vehicles in the area adhered to the limit.

TfL will now require all new buses from 2017 to have this technology fitted in a bid to slow down the traffic around them and bring about fewer and less serious casualties.

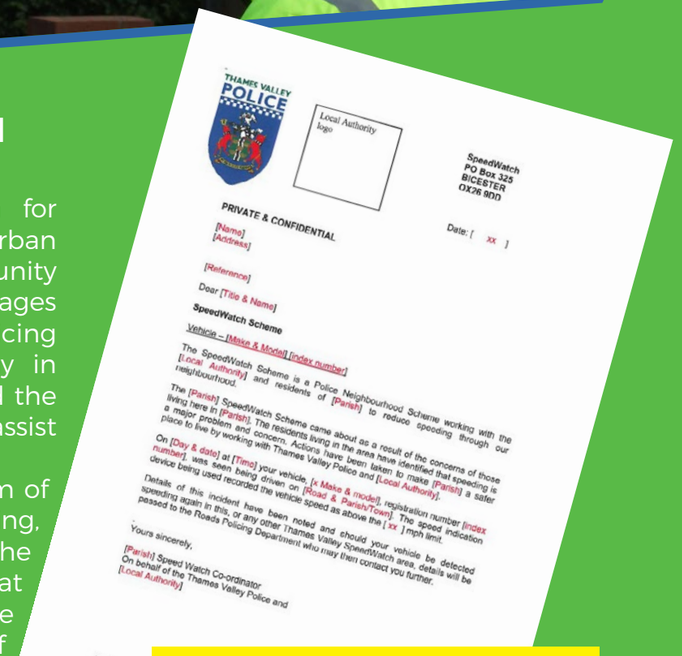
ISA will supplement the work already underway to use the iBus system fitted to all of London's 9,000 buses to monitor bus speeds and take action to mitigate speeding.

MAKING SPEED A COMMUNITY ISSUE

COMMUNITY SPEEDWATCH

Speeding continues to be a concern for many communities in both rural and urban environments. Therefore, Community Speedwatch (CSW) is not restricted to villages and rural towns. Neighbourhood Policing Panels have an important role to play in developing safer urban communities and the adoption of speedwatch schemes could assist them to more easily achieve their goals.
The scheme aims to address the problem of real or perceived speed-related offending, and through partnership with the community, it is used in circumstances that are necessary, justifiable and proportionate in order to increase public awareness of inappropriate speed.

In West Berkshire such schemes have been introduced as part of a speed intervention programme and are operated by the Road Safety Team. CSW schemes operate on 20-40mph roads, and uses CCTV camera technology to identify vehicle indexes.
The registered keeper of the offending vehicle receives a letter, with Police follow up. On average, 250 letters are issued every month.
Overall, it is proving to be successful in tackling speeding issues and initiating further support from the police, and the collection of postcode data provides West Berkshire's road safety team with a useful platform to deliver other education messages
Transport for London also operates community roadwatch schemes, with volunteers recording details of vehicles travelling at 10 per cent plus 2mph above the speed limit, and follow-up contact with the registered keeper.


THAMES VALLEY POLICE

Local Authority logo

SpeedWatch
PO Box 325
BICESTER
OX26 9DD

PRIVATE & CONFIDENTIAL

Date: [xx]

[Name]
[Address]

[Reference]

Dear [Title & Name]

SpeedWatch Scheme

Vehicle – [Make & Model] [index number]

The SpeedWatch Scheme is a Police Neighbourhood Scheme working with the [Local Authority] and residents of [Parish] to reduce speeding through our neighbourhood.

The [Parish] SpeedWatch Scheme came about as a result of the concerns of those living here in [Parish]. The residents living in the area have identified that speeding is a major problem and concern. Actions have been taken to make [Parish] a safer place to live by working with Thames Valley Police and [Local Authority].

On [Day & date] at [Time] your vehicle, [x Make & model] registration number [index number], was seen being driven on [Road & Parish/Town]. The speed indication device being used recorded the vehicle speed as above the [xx] mph limit.

Details of this incident have been noted and should your vehicle be detected speeding again in this, or any other Thames Valley SpeedWatch area, details will be passed to the Roads Policing Department who may then contact you further.

Yours sincerely,

[Parish] Speed Watch Co-ordinator
On behalf of the Thames Valley Police and
[Local Authority]

CHERYL EVANS
WEST BERKSHIRE COUNCIL

CHANGING DRIVER BEHAVIOUR

DR FIONA FYLAN

NATIONAL DRIVER OFFENDER RETRAINING SCHEME (NDORS)

The National Speed Awareness Course provides an alternative to prosecution for drivers caught speeding a little above the speed limit (speed limit +10% + 2–6mph). The provision of a common national course means that drivers can choose a course from any of the participating providers, making the course more accessible.

There are two core versions of the course: those based solely in a training room lasting four hours; and those based both in a car and a training room lasting five hours. In addition, a shorter three-and-a-half hour course is being piloted in one area.

Independent research was carried out among 2070 people taking part in the courses. Drivers completed three questionnaires: one before the course; one after the course; and a follow-up questionnaire three months after the course. An excellent response rate of 31% was achieved at follow-up, giving confidence that findings on the long-term effects of the course are valid. Six focus groups were conducted with participants to explore their perceptions of the course, any changes to their driving following the course, and the reasons for any changes (or lack of changes).

The research provides evidence that the National Speed Awareness course produces positive changes in attitudes with drivers perceiving fewer advantages and more disadvantages of speeding. The course makes it easier for clients to identify the speed limit for the area in which they are travelling and produces greater intentions to drive within the speed limit in the future.

Previous research for the Department for Transport showed that drivers who were not offered a course did not show these increases. These changes are maintained at follow-up, indicating that the course provides clients with continued protection. The course produces approximately the same effects in males as in females with the exception of beliefs about how bad speeding is: the course helps males to "catch up" with females so that they view speeding in urban areas as just as bad as females do.

A total of 99% of clients who responded at follow-up reported that they had changed their driving after attending the course, notably driving more slowly, being more aware of the road environment and of their speed, and feeling less stressed while driving. While a minority (9%) described how they had found it difficult to break their driving habits, and that they sometimes felt pressure from other drivers to speed up, particularly on motorways, the majority (90%) reported that they had not experienced any difficulties in applying what they had learnt. There are very few statistically significant differences in changes produced by the three different types of course.

Drivers who attended the five-hour course rate it significantly higher in improving their driving and helping them become safer drivers than those who attended the other course types. These outcomes are not, however, course objectives but instead provide benefits over and above the course aims. The in-car element of the five-hour course is frequently reported as being the most valuable although this aspect contains material delivered in the training room in the other two versions of the course. Focus group participants who attended the five-hour course noted that the time spent in the classroom was rather rushed and did not provide an opportunity to explore different viewpoints. Drivers reported many different aspects of the course as being the most useful, including being more aware of the need to watch out for hazards, being more aware of the difference that a few mph can make to the severity of a collision, learning how to identify the speed limit area they are in, and learning techniques to better monitor and manage their speed.

Focus group participants' accounts showed that they have recalled and applied a substantial amount of the course. Their discussions indicate the course is achieving its effects through four mechanisms: It provides information that challenges drivers' attitudes towards speeding; helps them to recognise that the advantages are not as great as they may have assumed; helps them understand the reason for speed limits being set as they are; and helps them realise that the driving environment is more hazardous than they had appreciated. The course gives clients greater insight into their own driving, including the pressures that they face and the limits to their own knowledge. The course enables drivers to assimilate and apply what they have learnt by giving them skills in identifying speed limits, and easy-to-recall tips, knowledge and skills to improve their driving style. Many become advocates for the course and share their new knowledge and skills with friends and family. They promote slower more relaxed driving styles and actively encourage others to slow down.

DR FIONA FYLAN
NDORS

NEXT STEPS

At the heart of the Safe System approach to road safety is the fallible and vulnerable human that requires protection. Humans are inherently vulnerable and impact speeds from 30km/h can significantly increase the risk of death and thus managing speed within a road system is critical in keeping people safe.

JESSICA TRUONG
TOWARDS ZERO FOUNDATION

Effective, evidence based speed management solutions are available, including better and safer road design, traffic calming, production of safer vehicles, equipping vehicles with intelligent speed assist and autonomous emergency braking, setting appropriate speeds limits suitable for the function of the road and enforcement to encourage road users to comply with speed limits.

These speed management solutions are known and available and the important next step is effective implementation. With the 2020 target to reduce road fatalities by 50% fast approaching, governments and road safety professionals are encouraged to implement as many effective speed management policies as a matter of urgency to further save lives and prevent long term health impairments.

PRINCE MICHAEL INTERNATIONAL ROAD SAFETY AWARDS

Prince Michael
INTERNATIONAL
ROAD SAFETY AWARDS
Recognising achievement and innovations which will improve road safety

For nearly thirty years HRH Prince Michael of Kent has played a leading role in supporting improved road safety both in the United Kingdom and around the world.

The Prince established his awards scheme in 1987 in the UK and now fully international, the Prince Michael International Road Safety Awards recognise achievement and innovation in road safety worldwide.

Each year the most outstanding examples of international road safety initiatives are given public recognition through the scheme and the winners are invited to a Gala Presentation held in London, where the Prince announces his Premier Award for that year.

In addition to the international awards, the Prince annually presents a Decade of Action Award to recognise major contributions to the Global Decade of Action for Road Safety 2011-2020.

Over many years the Prince has visited award winners in Africa, Asia, Europe, Australia and America to see at first-hand their achievements and has an unrivalled experience in seeing successful road injury prevention in practice.

Prince Michael served as Patron of the influential Commission for Global Road Safety, and strongly supported the current Decade of Action for Road Safety. Now as patron of the newly established Towards Zero Foundation, HRH continues to lend his support to improved global road safety.

These awards are organised and managed by RoadSafe.

HRH Prince Michael of Kent present an award to Christian Friis-Bach of the UNECE

AWARD WINNERS FEATURED IN THIS REPORT

roadsafetyanalysis

Road Safety Analysis created MAST, a revolutionary online analysis tool, and received the award in recognition of its innovation and contribution to road safety.
The unique system provides national collision data for in-depth analysis, and gives insight into the people involved in crashes. It accesses data for all road crashes in the UK and builds profiles of risk groups in specific areas. This means resident risk and crash migration can be monitored in ways that were previously impossible.

MAST is the first national online tool of its kind, and it is helping regional road safety professionals improve and maintain safety standards across their borders.
It was launched in September 2009, and is now an essential source for road safety professionals.

West Berkshire COUNCIL

SAFER ROADS, BERKSHIRE
BRACKNELL, READING, SLOUGH, WINDSOR & MAIDENHEAD, WEST BERKSHIRE & WOKINGHAM

Since April 2011, Safer Roads Berkshire has been operating under a completely redesigned structure to protect public investment and maintain expertise working to improve safety on Berkshire's roads. The new way of delivering road safety has reduced costs, increased output and helped to deliver a wider range of more effective road safety initiatives to support each authority. A programme of work now exists to address issues ranging from pedestrian training and child car seat use through to cycle safety, driving for work and risks associated with ageing. All of these projects are being backed up by rigorous evidence and evaluation.

JENOPTIK

JENOPTIK

Jenoptik, formerly Vysionics, has been behind a number of successful schemes including one delivered by Nottinghamshire County Council which implemented a SPECS3 average speed enforcement system covering 21km of the route. Nottinghamshire already operate several average speed enforced routes, but the A614 was the first to deliver a number of innovations including infra-red flood lighting on dark sections of road. In addition, the A614 scheme was also the first ever project procured through the Traffic Management Technology framework, managed through the Crown Commercial Service (CCS). This enabled efficiencies in terms of project delivery, time saved, effort and money.

RAC Foundation

PREMIER AWARD - RAC FOUNDATION

The Royal Automobile Club Foundation for Motoring Ltd is a charity which explores the economic, mobility, safety and environmental issues relating to roads and responsible road users. Independent and authoritative research, carried out for the public benefit, is central to the Foundation's activities.
In 2010/11 the Foundation undertook or commissioned more than a dozen pieces of research, many directly relating to road safety issues. Its highly influential report 'The Effectiveness of Speed Cameras- A review of evidence' had a significant impact on policy and aided numerous police forces both in the UK and further afield to make the case for speed camera enforcement in the face of significant funding challenges.

AVERAGE SPEED CAMERA A9 SAFETY GROUP

The case study featured the A9 between Perth and Inverness where the Scottish Government has committed to a £3 billion strategy to fully dual the road by 2025. The A9 Safety Group comprising experienced representatives from public and private sectors, was established to improve safety on the route during this intervening period. The Group's 'Interim Safety Plan' comprising a mix of engineering, education and enforcement measures developed from independent research, was designed to improve driver behaviour with the over-riding objective of reducing the number of people killed or seriously injured. Central to the strategy was the use of average speed cameras.

TRANSPORT FOR LONDON - SAFE STREETS FOR LONDON: MAKING CYCLING, WALKING AND MOTORCYCLING SAFER IN LONDON

Transport for London (TfL) and the Mayor of London have an ambition to work together towards roads free from death and serious injury. Pedestrians, cyclists and motorcyclists who together make up around 80 per cent of all those killed or seriously injured on London's roads are the prime focus of 'Safe Streets for London', a comprehensive road safety plan underpinned the ambition to free London's roads from killed and serious injury casualties.

Innovative analysis, determined ambition and positive leadership combine to ensure that the safety of London's vulnerable road users continues to improve. This uncompromising focus on vulnerable road user safety sets an international benchmark.

TfL aims to reduce the number of people killed and seriously injured (KSI) on London's roads by 50 per cent by 2020 (stretched from 40 per cent) from the 2005-09 baseline.

TfL's long term commitment to road safety is supported by a doubling of funding to road safety over the next decade. This significant increase is to ensure that the actions set out in the vulnerable road user plans are adequately resourced to deliver the significant reduction in KSIs required.

PREMIER AWARD - NDORS - NATIONAL DRIVER OFFENDER RETRAINING SCHEME

NDORS, operated by all UK police forces, offers a diversion from prosecution into driver education for motorists who have committed a low level offence. The police decide whether or not to divert the offender to a driver education course by applying the public interest test. NDORS has correlations to other types of disposal options open to the law enforcement bodies, such as Restorative Justice. NDORS allows the offender to choose from a course venue anywhere that offers the national course no matter where the offence took place.

There is no draw on the public purse and the money generated by the authorities through NDORS is diverted back into road safety, with the costs for administration and delivery of the course being met by the 'offender'. On completion of the course, the original offence lapses and there no further action is taken in relation to prosecution. Attendance on the course is recorded on the national database, which excludes attendance at a similar course for three years. If the offender refuses the offer of a driver education course, the case reverts to a standard criminal justice process. More than a million motorists have attended the course and it is being replicated internationally.

HIGHWAYS ENGLAND DYNAMIC HARD SHOULDER COMPLIANCE CAMPAIGN

Smart Motorways are being rolled out across the Strategic Road Network with local and national publicity advising motorists on the operating conditions of the hard shoulder. These campaigns can be limited in their reach and duration which can lead to misunderstanding, misuse and sometimes illegal driving.

Driver education has traditionally been conducted through established methods, e.g. driving theory test and information campaigns. These take time to filter through to the wider driving population, are difficult to evaluate and to understand the effects on driver behaviour and attitude, so a more creative approach was needed to accurately target the illegal use of the hard shoulder.

The concept of issuing warning letters and information leaflets was established to educate rather than punish offenders, to reduce repeat offences and also the likelihood of copy-cat driving. A different approach was clearly needed with over 30,000 recorded offences during a limited campaign.

Highways England led the collaboration of the Police, Safety Camera Partnership and Motorway Operations to implement new back office systems and procedures for the campaign. ARUP and AECOM delivered this unique approach of bringing together independently owned, complex systems and procedures to: identify offending vehicles, their owners and ultimately issue a warning letter and supporting educational information to change behaviours.

An initial system has been active from late 2014 and has seen over 30,000 non-compliant drivers being contacted. Early results show a significant reduction in the number of repeat offenders.

PACTS

Parliamentary Advisory Council for Transport Safety

The Parliamentary Advisory Council for Transport Safety (PACTS) is a registered charity. Its charitable objective is: to protect human life through the promotion of transport safety for the public benefit. PACTS provides the secretariat to the All-Party Parliamentary Group for Transport Safety

Unless the Government acts, a third of a million people will be killed or seriously injured on the roads in Great Britain over the two decades ending 2030, representing a loss to society valued at approximately £110 billion. Despite a downward trend there will still be approximately 1,000 road deaths per year in 2030 unless concerted action is taken.

PACTS calls on the UK Government, the devolved administrations, their agencies and local government to take the strategic, evidence based initiatives to address the risks on UK roads, such as:

- Adopt a long-term vision for a safe transport system free from death and serious injury
- Set challenging national quantitative targets for road safety
- Improve road user standards
- Improve road network safety
- Improve vehicle safety
- Review emergency medical response to collisions and enhanced trauma care

ROADSAFE®

Our mission is to reduce road deaths and injuries by supporting and encouraging partnerships between the private sector and road safety professionals to promote the safe system sharing knowledge, encouraging innovation and recognising achievement.

Key programmes:

RoadSafe Knowledge – projects to support improved availability of good knowledge among professionals. These now include advice to sponsors and professional bodies, these include The Road Safety Observatory and The Global Knowledge Practice

Driving for Better Business - An ongoing campaign being to raise awareness of the importance of work-related road safety in the business community and public sector by using advocates drawn from these communities to promote the business benefits of managing it effectively.

Driving for Better Business

Save Lives

#SlowDown