



Policy Position:

# **SPEED MANAGEMENT**

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# **ADEPT**

The Association of Directors of Environment, Economy, Planning & Transport

# POLICY POSITION: SPEED MANAGEMENT

## KEY MESSAGES

- Speed management is an important aspect of creating a highway network that is safe for all users. It should form a critical part of any strategy to address the number of people killed or seriously injured (KSI) on roads in the UK.
- In order to support compliance, there is a need for greater consistency between local highway authorities (LHAs) on the deployment of speed management measures and the setting of local speed limits. To assist with this, the government should provide clearer guidance on the setting of speed limits.
- LHAs have limited resources and budgets to undertake road safety work. The government must provide LHAs with sufficient funding and resources to carry out this work and implement speed management measures.
- Any reduction in the default speed on roads in urban areas from 30 mph to 20 mph must be evidence led. To avoid confusion amongst motorists, any change must be rolled out nationally, rather than by individual LHAs.
- A safe system approach to speed management must be adopted. National speed limits provide a useful starting point, but speed limits must be determined by a road's function.
- The government must continue to review the potential benefit that new, in-vehicle technologies could have on speed management.
- Speed enforcement must form part of any speed management strategy. New and more innovative ways of enforcing speed limits should be explored, particularly on roads where traditional camera systems are not cost effective.



## 1. Introduction

**Speed management is defined as the deployment of techniques aimed at persuading drivers to adopt safe speeds to improve road user safety and reduce the number of people killed or seriously injured. Techniques include police enforcement, driver education, speed limits and engineering treatments.**

Responsibility for planning, implementing, and enforcing speed management initiatives generally rests with LHAs and the police. However, for the police, speed management is not a core task, with budget cuts resulting in the reduction of traffic policing numbers and activities<sup>1</sup>. LHAs are also resource constrained both in terms of staff, and the financial budgets to deliver speed management initiatives. In addition, the abolition of the regional tier of governance in 2010 has hindered the coordination of speed management initiatives between LHAs.



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<sup>1</sup> <https://www.evo.co.uk/news/19768/british-road-traffic-police-numbers-on-the-decline#:~:text=Britain's%20traffic%20cops%20have%20been,for%20the%20thrill%20of%20driving%3F&text=A%20freedom%20of%20information%20request,to%20just%20%2C643%20in%202017.>



## 2. Road safety policy context

Historically, central government has provided high level guidance on road safety, along with long term funding and targets. However, emphasis has shifted away from these with significantly reduced budgets for local authorities. This has led to many LHAs having a reduced ability to resource road safety initiatives, and consequently less consistency between their respective approach and response to road safety issues.

To help the government to benchmark current road safety and analyse potential improvements which could be made, the Department for Transport (DfT) commissioned Systra to produce the Road Safety Management Capacity Review (RSMCR)<sup>2</sup>. The review identified uncertainty surrounding future directions of road safety legislation and asked for stronger central government leadership. It also called for a national road safety performance framework, as well as clearer long term and interim road safety targets.

The government's current approach to addressing road safety issues in England is set out within their refreshed 2019 Road Safety Statement<sup>3</sup> and includes a two-year action plan to address road safety issues. The statement acknowledges progress in promoting safer roads has plateaued in recent years, and that more work is needed to tackle the safety of those users who are disproportionately represented in casualty data. To address this, the report promotes a wide range of measures and initiatives centred around safer people, safer vehicles and safer roads. In the specific context of speed management, the report proposes better judicial systems for reckless driving behaviours, better education for drivers (particularly younger drivers) and the establishment of a Rural Road Users Advisory Panel that can deal with the issue of rural speeding and speed limits.

In July 2021, the government announced that it will be producing a long-term Road Safety Transport Strategy that will include the outcomes from the Roads Policing Review and the Highway Code review of cycling and walking.<sup>4</sup>

<sup>2</sup> <https://www.gov.uk/government/publications/road-safety-management-capacity-review>

<sup>3</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/817695/road-safety-statement-2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/817695/road-safety-statement-2019.pdf)

<sup>4</sup> <https://www.gov.uk/government/publications/department-for-transport-outcome-delivery-plan/dft-outcome-delivery-plan-2021-to-2022>



### 3. Existing guidance on the setting of speed limits

#### ***Circular 01/2013 setting local speed limits***

The government's guidance on the setting of speed limits is set out within DfT's Circular 01/2013.<sup>5</sup> This document provides a framework that LHAs should follow when reviewing and setting local speed limits when national speed limits are not appropriate. Circular 01/2013 states that speed limits should be evidence-led, self-explaining and seek to reinforce people's assessment of what is a safe speed. It also states that speed limits should encourage self-compliance and should be seen by drivers as the maximum, rather than a target speed.

Circular 01/2013 only provides a broad framework for the setting of speed limits. To ensure speed limits are determined consistently across a set geographic area, many LHAs have developed their own speed management strategies. However, this approach has resulted in inconsistency between them in how they set local speed limits.

#### ***National speed limits***

National speed limits provide the default speed limit for different types of carriageways in rural and urban environments. They provide a default starting position from which the speed limit can be adjusted by LHAs to reflect a road's function, environment and use by different types of users. Although the speed limit of urban and strategic routes is often modified in this way, rural single carriageway roads are often set at the national speed limit, despite it not being possible for vehicles to travel at that speed along those routes.

To address this and ensure that speed limits on rural single carriageway roads are safe, work is currently being undertaken by Surrey County Council to establish more appropriate speed limits on these roads across the county. The outcome will be relevant to other LHAs who are considering rural speed limit reductions and will look at a range of measures including compliance, casualty rates, speed, traffic flow and public perceptions.

#### ***Establishing an appropriate speed limit***

ADEPT considers an appropriate speed limit to be a safe speed limit. The factors which determine whether a speed limit is safe are:

- **The function of the road, which can be determined by factors such as the type of users of that road.**
- **The environment – assessed by reviewing historic data such as existing speed data, personal injury accident information, etc.**
- **Compliance with existing, and the likely compliance with, future speed limits.**
- **Consultation with residents and stakeholders to reflect appropriateness.**

<sup>5</sup> <https://www.gov.uk/government/publications/setting-local-speed-limits/setting-local-speed-limits>



## 4. Managing safe speeds through the design of the road network

### **Safe system approach**

The 2019 DfT Safe System approach<sup>6</sup> is based on Transport for London's (TfL) "Vision Zero" which states that fatal or serious injuries that occur within the road system are unacceptable.<sup>7</sup>

The approach recognises that human error is no longer the singular cause of collisions that result in death or serious injury. Rather, both behaviour and design of the road system are to blame, including vehicles, streets and speeds.<sup>8</sup>

The safe system approach is comprised of five components: safe road use, safe speeds, safe vehicles, post-crash care, and safe roads and roadsides.<sup>9</sup> In the context of safe speeds, a safe system approach determines allowable speeds by the protective quality of roads, roadsides and vehicles; enforces existing speed limits; and educates road users to ensure that they comply with speed limits.<sup>10</sup>

Inappropriate speed within the posted speed limit rather than road design and/or a speed limit that discourages a safe driving speed, is typically cited as a contributor of road crashes. Adopting a safe system approach would encourage an appropriate speed from the outset.

In the UK, speed classification is not aligned to a safe system. Instead, it is based on national speed limits, with much of the network allowing speeds which exceed the protective elements of roads, roadsides and vehicles against death and serious injury. This is particularly notable on rural single carriageway roads where the national speed limit is 60 mph and urban roads where the national speed limit is 30 mph. LHA speed management is typically based on casualty data rather than safe system principles and measurement.

In Sweden and the Netherlands, early implementation of the safe system approach involved a review of national road classifications to ensure alignment of road function, design and layout, and speed limit. For example, in the Netherlands this included building motorways with full median separation, providing footpaths for pedestrians and separate bicycle tracks for cyclists, and the large-scale construction of roundabouts and home zones.

### **Traffic calming and other engineering techniques to manage vehicle speeds**

Traffic calming measures and other engineering techniques, such as the reallocation of road space and creation of low traffic neighbourhoods, can be used to encourage users to travel at lower speed. Correctly implemented, these measures can engender safer travel speed behaviours and encourage smoother flows of traffic. However, traffic calming measures and other engineering techniques to manage vehicle speeds should only be considered where users are not complying with the signed speed limit, for example, when a new 20 mph speed limit has been introduced.

<sup>6</sup> The Road Safety Statement 2019: A Lifetime of Road Safety

<sup>7</sup> <https://tfl.gov.uk/corporate/safety-and-security/road-safety/vision-zero-for-london>

<sup>8</sup> <https://www.rospa.com/road-safety/advice/drivers/safe-system-approach>

<sup>9</sup> <https://www.rospa.com/rospaweb/docs/advice-services/road-safety/roads/safe-system.pdf>

<sup>10</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/717062/road-safety-management-capacity-review.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/717062/road-safety-management-capacity-review.pdf)





## 5. Introduction of 20 mph speed limits in urban areas

### **Existing guidance**

Guidance on the introduction of 20 mph speed limits in urban areas is set out in DfT's Circular 01/2013. This states that LHAs can set 20mph speed limits in areas where local needs and conditions suggest the current speed limit is too high. This includes major streets where there are, or could be, significant numbers of journeys on foot, and residential streets where roads are being used by pedestrians and cyclists.

Circular 01/2013 recommends that 20 mph speed limits are introduced where the mean speeds are already 24 mph or less, and there is expected to be a positive effect on road safety and a generally favourable reception from local residents.

The Circular identifies the characteristics of successful 20 mph zones - those that are self-enforcing, lead to a mean traffic speed compliant with the speed limit, and have no expectation on the police to require additional enforcement unless otherwise agreed. However, it is not mandatory for LHAs to follow the guidance, which has led to significant variation between LHAs in how 20 mph zones are delivered.

### **Reducing the default speed limit in urban areas to 20mph**

Reducing the default speed limit to 20 mph in urban areas should be considered carefully, with any change evidence led.

Recent trials have shown 20 mph speed limits in urban areas to have minimal impact on average speeds. In the Scottish Borders, a trial of 20 mph speed limits at 97 settlements found that vehicle speeds only reduced by an average of 3 mph, with speeds reducing by 6 mph in some areas.<sup>11</sup> Additional mitigation, such as traffic calming and changes in the design of the highway, may be required to ensure compliance.

The Welsh Government is in the process of reducing the speed limit on restricted roads from 30 mph to 20 mph. A consultation was held in Autumn 2021, and the first phase of the project is being rolled out in eight communities across Wales. It is important that the impact of this change is monitored and should not be confined to the average speed of vehicles. It should also include the use of urban roads by pedestrians and cyclists and the KSI numbers. The results can then be used to support any reduction in other parts of the UK.

Any decision to reduce the national speed limit in the rest of the UK should be taken by national government, rather than by individual LHAs. If urban speed limits are only reduced in selected LHAs, it risks creating confusion amongst drivers, especially those who frequently travel across borders. Any change must be funded by government and cover the cost of removing existing 30 mph signage, installing new 20 mph signage and modifying or creating new traffic regulation orders. LHAs do not have the budget to absorb these costs.

To ensure compliance, any change in the speed limit will need to have majority support by members of the public. To demonstrate this and understand existing views, a thorough consultation and engagement exercise must be undertaken, supported by evidence that captures the behaviours of drivers on roads with different types of infrastructure.

<sup>11</sup> <https://www.bbc.co.uk/news/articles/cj7rwq7k99xo>



## 6. The role of emerging in-vehicle technologies

### **Intelligent speed assistance**

Emerging in-vehicle technologies have the potential to help enforce speed limits through Intelligent Speed Assistance (ISA). The system uses digital maps and speed sign recognition to detect and prevent the driver from exceeding the posted speed limit. In the European Union and Northern Ireland, ISA will be mandatory for new vehicles from July 2022, and all new cars from July 2024.<sup>12</sup> No decision has been made on whether the rest of the UK will adopt the requirement for all new vehicles to have ISA.<sup>13</sup>

Embedding ISA within vehicles could encourage greater compliance or behaviour change, particularly by drivers who accidentally exceed the speed limit. However, because the ISA system will be overridable, it is unlikely to have any impact on drivers who pose the greatest risk to road user safety and actively choose to travel at speeds higher than the posted limit.

Combined with ISA, fully and semi-autonomous vehicle technology could significantly improve road user safety, for example, through automatic crash detection where the brakes are applied if an imminent collision is detected.

### **Collection of telematic data**

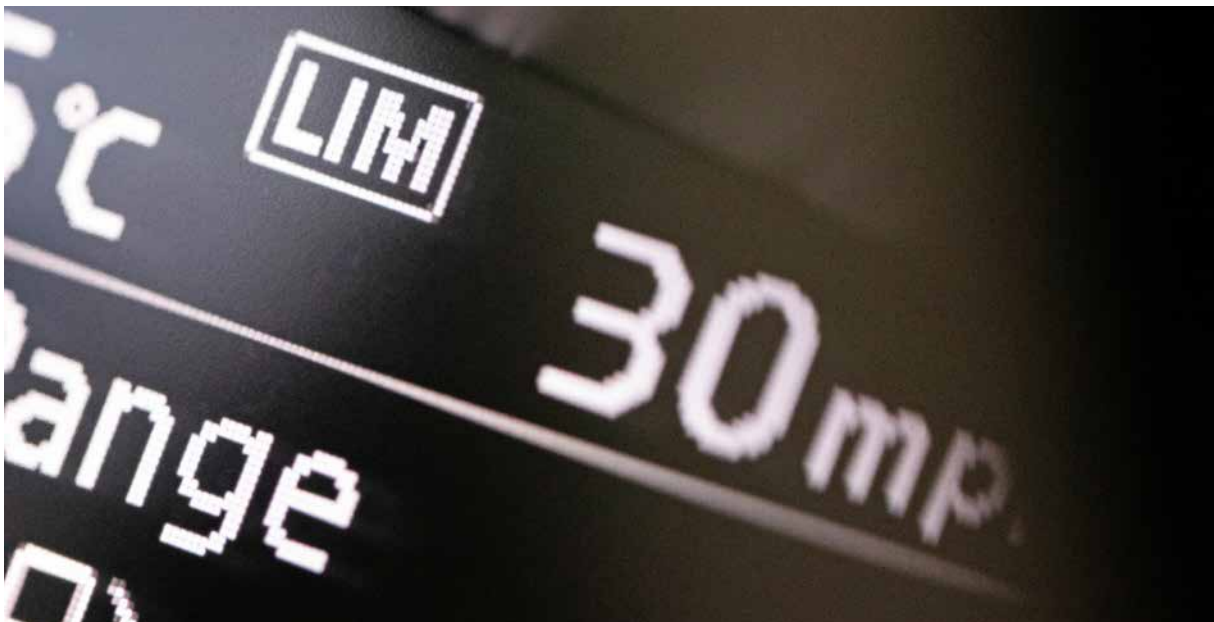
The collection of in-vehicle telematic data, such as Trafficmaster Data, can help inform the development of successful speed management policies by providing practitioners with detailed information on vehicle speeds along selected routes. By enabling the collection of large quantities of data, this approach is more robust than spot speed surveys and is unlikely to be skewed by vehicles slowing in response to speed cameras.

Telematic data can also be used to help incentivise and reward drivers travelling at lower speeds. This approach is already used by some insurance companies who fit black box recorders in drivers' cars (an approach particularly popular with younger drivers).

There is an opportunity for all new vehicles to have an on-board black box that records telematic data. In the event of an accident, it would enable investigators to establish the speed that the vehicle was travelling. This would make it easier for investigators to confirm whether speed was a contributory factor, as well as support the introduction of speed limit reductions and other road safety interventions in areas with a high number of KSI.

<sup>12</sup> [https://road-safety-charter.ec.europa.eu/resources-knowledge/media-and-press/intelligent-speed-assistance-isa-set-become-mandatory-across\\_en](https://road-safety-charter.ec.europa.eu/resources-knowledge/media-and-press/intelligent-speed-assistance-isa-set-become-mandatory-across_en)

<sup>13</sup> <https://www.pacts.org.uk/future-of-transport-regulatory-consultation-pacts-response/>





## 7. Speed enforcement

Speed enforcement must form a key part of any speed management strategy, with STATS19 data showing excess speed to be one of the top five causes for collisions involving motorcyclists, young car drivers (17-24 years) and vehicles involved in collisions with pedestrians.<sup>14</sup>

### **Average speed cameras**

Average speed cameras have been shown to reduce fatal and serious collisions by 36% along the sections of roads where they have been deployed.<sup>15</sup> National Highways and LHAs should continue to deploy average speed cameras across the strategic and local highway network.

There is a high level of demand from local communities across the UK for LHAs to install average speed cameras. However, the challenge faced by most LHAs is that they do not have the budgets to deploy them in the areas where they are required. To address this, the government must provide LHAs with additional funding to undertake speed enforcement activities, or alternatively, enable LHAs to retain in part or full, the fines generated by average speed cameras. This funding could be spent on other road safety initiatives including the installation of more average speed cameras and meet ongoing camera maintenance costs..

### **Safety camera partnerships**

Safety Camera Partnerships (SCPs) are a collaboration of different relevant organisations, for example, LHAs and the police, that aim to reduce road casualties. SCPs are responsible for the deployment of cameras to enforce speed limits. The use of SCPs has been identified as a success by several local government organisations, but more recent partnerships have had mixed results with several being abandoned due to a lack of funding from LHAs.

The structure of SCPs varies across England. To ensure the success of these schemes, best-practice must be shared amongst SCPs so that replicable models can be developed. Partnerships must also be supported by government through funding and national road safety policy.

### **National Driver Offender Retraining Scheme (NDORS) - speed awareness courses**

The National Driver Offender Retraining Scheme offers a framework for local police and fire authorities to promote safer driving behaviours. The scheme includes the delivery of speed awareness courses as an alternative punishment measure to fixed penalty notices (fines and points on licence) and is offered by most police authorities in the UK. The courses were found to reduce reoffending (although a study undertaken by Ipsos Mori<sup>16</sup> found that it only reduced reoffending by 2.1%), but there was no statistically significant link between course participation and injury. Given the low impact on reoffending, the government should consider whether money spent on this scheme could be better spend on other road safety initiatives that target behavioural change.

### **Other speed monitoring techniques**

The use of new and emerging technologies to monitor and enforce speed limits should be explored, particularly on low use roads or where traditional measures are not cost effective. This includes using artificial intelligence and static video cameras or vehicle-based speed cameras. In France, vehicle-based speed cameras have been successfully trialled on roads where dedicated speed enforcement infrastructure would be too costly.<sup>17</sup>



<sup>14</sup> <https://data.gov.uk/dataset/cb7ae6fo-4be6-4935-9277-47e5ce24a11f/road-safety-data>

<sup>15</sup> Effectiveness of average speed cameras in Great Britain - RAC foundation.

<sup>16</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/706208/national-speed-awareness-course-evaluation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/706208/national-speed-awareness-course-evaluation.pdf)

<sup>17</sup> <https://trans.info/en/eight-more-regions-with-unmarked-speed-cameras-234211>

## 8. Driver engagement and education

Driver engagement and education is key to improving compliance and fostering public support for speed management initiatives, including enforcement. Education must focus on road safety benefits, but it must also emphasise advantages for the environment and other road users, including the opportunity to improve and facilitate journeys on foot and cycle.

## 9. What ADEPT has done to date

ADEPT's Transport and Connectivity Board actively engages with important stakeholders in this arena such as the Department for Transport, the UK Health Security Agency (UKSHA), Sustrans, PACTS and the Association of Directors of Public Health (ADPH). The ADEPT Traffic and Safety Working Group seeks to share learning and support the development of road safety policy and guidelines amongst member organisations.



## 11. Key asks of government

- **Provide LHAs with support on implementing speed management initiatives** - LHAs would welcome additional support from government including stakeholder management and education, and understanding how they can best avoid legal challenges.
- **Make sure that decision making captures the wider benefits of speed management initiatives** - decisions should not be based solely on KSI statistics, but capture wider benefits including the impact of speed limit reduction on the number of people walking and cycling, for example.
- **Establish targets and provide LHAs with long-term funding to implement speed management initiatives** - this will help LHAs plan and consider what capacity they have to deliver. Support from government should include providing LHAs with long-term funding to deliver road safety improvements through new technologies, infrastructure, engagement and education. Government should also consider linking road safety to planning policies to enable LHAs to generate new revenue streams, such as from S106 contributions.
- **Produce new guidance on the setting of speed limits and deployment of speed management initiatives to ensure greater consistency between LHAs** - LHAs would welcome the preparation of a speed management toolkit that can be used by practitioners. This should cover all types of speed management initiatives, but particularly those suitable for deployment in 20 mph areas.
- **Publish information on existing speed limits** - the government should collate and publish a free up-to-date digital dataset of speed limits on all roads in the UK. This would enable navigation systems to advise drivers of the speed limit of that area, support the adoption of ISA and enable a national comparative study of speed limit compliance using telematic data such as Trafficmaster. This information will also help LHAs target and deploy their own speed management initiatives.
- **Develop a rural speed strategy** - the government should consider the development of a new rural speed strategy to address the fact that most fatalities occur in rural areas. The strategy should focus on speed management initiatives suitable for deployment in non-urban locations.
- **Monitor the success of 20 mph projects in the UK** - the government must monitor the success and effectiveness of projects in Wales and the Scottish Borders. The results of these trials should be used to inform any future decision on the reduction in the default speed in urban areas to 20 mph in the rest of the UK.





## 12. What ADEPT views to be the prerequisites of successful speed management policy

- It can be applied consistently across England and is broadly consistent with other UK countries.
- It provides LHAs with knowledge of what is a defensible position.
- It is based on the safe system approach and vision zero, with safety embedded across speed management policy and process.
- It has strong leadership.
- It is easy to understand by all users and stakeholders.
- It is evidence led.
- It is outcome focused.

- ADEPT members are the place-making strategists and policy shapers across top tier local authority areas
- ADEPT members are specialists, delivering services and sharing best practice across key sectors including environment, planning, housing, transport and economy
- ADEPT members design strategies for the future, taking communities beyond 2035
- ADEPT members operate in networks, cutting through boundaries to work with partners across the political, public, private and community sectors
- ADEPT members provide opportunities to develop new talent, supporting the Place Directors of tomorrow

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