

## Summary: Intervention & Options

<b>Department /Agency:</b> <b>Department for Transport</b>	<b>Title:</b> <b>Impact Assessment of amending The Traffic Signs Regulations and General Directions to improve signing of safety cameras</b>	
<b>Stage:</b> Implementation	<b>Version:</b> Final	<b>Date:</b> 1 June 2008
<b>Related Publications:</b> Traffic Signs (Amendment) Regulations and General Directions (2008)		

### Available to view or download at:

<http://www.dft.gov.uk>

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### What is the problem under consideration? Why is government intervention necessary?

Enforcement of speed limits is part of the Government's integrated road safety strategy which aims to achieve appropriate vehicle speeds and reduce road casualties. In some cases, current Traffic Signs Regulations and General Directions (TSRGD) prevent Highways Authorities from following the camera signing policy set out in the Department's guidance on the deployment of speed and red light cameras, which aims to help motorists to comply with speed limits at safety camera sites. This may have a negative impact on adherence to speed limits at these locations. Amendments to TSRGD are required to rectify this and ensure consistency of camera signing across speed limits. .

### What are the policy objectives and the intended effects?

To further assist drivers to recognise and comply with the speed limit in force to further reduce the number of road traffic collisions, injuries and deaths in which excessive speed is a contributory factor. Greater compliance would also reduce the risk to vulnerable road users and improve the quality of life for local communities. The policy change has already been implemented at most camera sites within the existing Traffic Signs Regulations and General Directions (TSRGD). Elements of these amendments to TSRGD enable implementation at remaining sites without the need to seek special authorisation.

### What policy options have been considered? Please justify any preferred option.

Option 1 - Introduce the proposed amendments to the Traffic Signs Regulations and General Directions. The preferred option, this received extensive support at the public consultation stage.

Option 2 - Require speed limit repeater signs to be placed on all roads. There was no support for this option at public consultation. It is therefore now excluded from this assessment. Whilst potentially improving compliance over the wider network, this would require the provision of hundreds of thousands of additional speed limit signs, at enormous financial cost to Traffic Authorities, and leading to very significant sign clutter.

### When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

The signing of cameras and speed limits is kept under review.

### **Ministerial Sign-off** For final proposal/implementation stage Impact Assessments:

***I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.***

Signed by the responsible Minister:

..... Date:

## Summary: Analysis & Evidence

Policy Option: 1

Description: Amend TSRGD to allow wider adherence to safety camera signing policy

<b>COSTS</b>	<b>ANNUAL COSTS</b>		Description and scale of <b>key monetised costs</b> by 'main affected groups'
	<b>One-off</b> (Transition)	<b>Yrs</b>	
	£ 0.3m	2	Costs to highway authorities of installing additional signs if they opt to do so.
	<b>Average Annual Cost</b> (excluding one-off)		
£ 0		<b>Total Cost (PV)</b>	£ 0.4m
<p><b>Other key non-monetised costs</b> by 'main affected groups'</p> <p>Cost of introducing carriageway roundels where deemed appropriate by Traffic Authorities and subsequently removing them if speed limit changes or enforcement ceases at a later date.</p>			

<b>BENEFITS</b>	<b>ANNUAL BENEFITS</b>		Description and scale of <b>key monetised benefits</b> by 'main affected groups'
	<b>One-off</b>	<b>Yrs</b>	
	£		
	<b>Average Annual Benefit</b> (excluding one-off)		
£		<b>Total Benefit (PV)</b>	£
<p><b>Other key non-monetised benefits</b> by 'main affected groups'</p> <p>Reduction in road accidents at safety camera sites. Improved compliance with speed limits at camera sites will result in savings in administration of justice costs.</p>			

### Key Assumptions/Sensitivities/Risks

Benefits of the policy rely on the response of drivers to further information regarding speed limits.

Price Base Year 2007	Time Period Years	<b>Net Benefit Range (NPV)</b> £	<b>NET BENEFIT (NPV Best estimate)</b> £
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What is the geographic coverage of the policy/option?	Great Britain			
On what date will the policy be implemented?	1 July 2008			
Which organisation(s) will enforce the policy?	Police			
What is the total annual cost of enforcement for these organisations?	£			
Does enforcement comply with Hampton principles?	Yes			
Will implementation go beyond minimum EU requirements?	No			
What is the value of the proposed offsetting measure per year?	£			
What is the value of changes in greenhouse gas emissions?	£			
Will the proposal have a significant impact on competition?	No			
Annual cost (£-£) per organisation (excluding one-off)	Micro	Small	Medium	Large
Are any of these organisations exempt?	Yes/No	Yes/No	N/A	N/A

<b>Impact on Admin Burdens Baseline</b> (2005 Prices)			(Increase - Decrease)		
Increase of	£	Decrease of	£	<b>Net Impact</b>	£

Key:	Annual costs and benefits: Constant Prices	(Net) Present Value
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[Use this space (with a recommended maximum of 30 pages) to set out the evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Ensure that the information is organised in such a way as to explain clearly the summary information on the preceding pages of this form.]

The Traffic Signs Regulations and General Directions 2002 No. 3113 (S.I 2002) (as amended) (“TSRGD”) set out the statutory requirements for signing speed limits, including sign designs and conditions of use. It also describes how informatory camera enforcement signs may be used to make the public aware that speed enforcement is being undertaken by safety cameras on a particular road.

In December 2005 it was announced that additional improvements would be made to the signing of safety cameras to further assist drivers to recognise and comply with the speed limit on roads where camera enforcement is taking place, including:

- Speed limit and camera signs were to be co-located where possible
- Signs were to be placed to allow the sign and camera to be visible to the driver in the same view.

It has been possible for safety camera partnerships to implement the above policy at most camera sites within the current wording of TSRGD, or through the Department issuing a special authorisation. However enabling the improvements to be implemented in a consistent way across all speed limits requires some amendment of the Regulations and General Directions of TSRGD. The main mechanisms by which the proposals are intended to do this are outlined below:

- TSRGD currently requires speed limit repeater signs to be placed "at regular intervals along a road". The proposed amendments would allow, where they are permitted, an additional speed limit repeater sign to be placed in the vicinity of a safety camera, notwithstanding that this might cause the repeater spacing to become irregular.
- TSRGD does not currently permit the use of speed limit repeater signs on restricted roads (roads subject to a 30mph limit due to the presence of a system of street lighting). The amendments would allow the use of up to two signs to diagram 880 on each approach to the area or route on restricted roads where camera enforcement is undertaken. This is intended to enable one sign to be placed on entry to the camera site and, where necessary, another within the same driver view of the camera. As a consequence it is proposed to remove the current requirement for the sign 880 to be placed within a specific distance from the camera site. At the same time the opportunity is being taken to clarify that diagram 880 can be used in conjunction with both fixed and mobile enforcement cameras.
- Currently Direction 18(1) of TSRGD currently only allows carriageway roundels to be used in conjunction with specified upright speed limit signs. The amendments would allow 30mph carriageway roundels to be placed on the road surface in conjunction with the informatory diagram 880 on restricted roads.
- TSRGD requires speed limit repeater signs to be placed only on street lit roads on which the national speed limit is in force. In July 2006 the Department specially authorised Traffic Authorities to use a new sign, Diagram 880.1, which combines the camera warning sign with the National Speed Limit sign (671). It is now intended through these amendments to formally incorporate this sign within TSRGD so that it can be used in exactly the same way as Diagram 880 but when camera enforcement is undertaken on unlit roads subject to that national speed limit.

- Whilst not directly related to camera signing, the Department is proposing to take this opportunity to clarify that the sign to diagram 675, end of 20mph zone, also signifies the start of a new speed limit.

A three month public consultation exercise was carried out over the period 18 June 2007 – 17 September 2007. The consultation consisted of two options:

Option 1 (preferred option) - Introduce the proposed amendments as per the draft amending statutory instrument set out in the consultation document. These would enable safety camera partnerships to implement the necessary improvements in signage in a cost-effective way and without undue sign clutter.

Option 2 - Require speed limit repeater signs to be placed on all roads. Whilst potentially improving compliance over the wider network, this would require the provision of hundreds of thousands of additional speed limit signs, at enormous financial cost to Traffic Authorities, and leading to very significant sign clutter.

The consultation showed strong support for Option 1. There was no support for Option 2. It was therefore dropped as an option and is excluded from this assessment.

## Analysis of Costs and benefits

### Proportion of drivers affected by the improved signing

The Department for Transport's 'Road Statistics 2006: Traffic, Speed and Congestion' shows that the proportion of vehicles exceeding speed limits varies by vehicle type and road. For example, on roads subject to a 30mph speed limit, 50% of cars were found to be in excess of this speed, while on 40mph-limit roads the proportion speeding was 27%. Table 1 shows the percentage of cars and motorbikes exceeding speed limits on built-up roads and motorways.

**Table 1: Speeding in Great Britain 2006**

Road type	30mph speed limit	40mph speed limit	Motorways (70mph limit)
Cars (%)	50	27	53
Motorcycles (%)	51	39	54

Based on the most recent figures, police in England, Wales and Scotland deal with around 2.3m speed offences per year<sup>1</sup>. At current levels around 200,000 offences are processed in magistrates' courts. The great majority of speeding offences (2.1m) are dealt with through the fixed penalty procedure. The fixed penalty for speeding is three penalty points and a £60 fine.

### Basis of costs and benefits

The following analysis assesses the costs and benefits of the preferred option of amending TSRGD, compared to the baseline scenario where there is no further improvement in the signing of safety cameras. However, it should be noted that the impacts anticipated in future years would be affected by trends in speed enforcement activity, driver behaviour and traffic levels. It has not been possible to fully account for these trends at this stage.

<sup>1</sup> Ministry of Justice (2007) 'Motoring Offences and Breath Test Statistics England and Wales 2005' <http://www.justice.gov.uk/docs/motoring-offencesandbreath-stats2005.pdf>, Scottish Executive (2007) 'Criminal Proceedings in Scottish Courts, 2005/2006' <http://www.scotland.gov.uk/Publications/2007/03/21083652/10>

## Option 1: Amend TSRGD as set out in the amending statutory instrument

### **Costs**

#### ***Implementation costs***

The primary cost of the proposed amendments will fall to Traffic Authorities who shall be responsible, where appropriate, for their implementation at camera sites. Based upon information provided by a safety camera partnership, the provision of an additional speed limit or camera sign generally costs a few hundred pounds, although signs on the Highways Agency trunk road network are more expensive (c.£8,000) due to the associated design works and installation of passive safety features on the high speed network. These amendments will apply only to small proportion of camera sites. Furthermore elements of the proposals are not mandatory, but are designed to give traffic authorities greater flexibility when the nature of the camera site may warrant the provision of additional signs. Assuming that additional signs were erected at 500 local authority sites (£125,000) and 25 highways agency sites (£200,000) as a result of these amendments, the overall implementation cost to Traffic Authorities would be £325,000.

There will be further costs where authorities decide to use carriageway roundels in places where they were not previously permitted to do so. It has not been possible to accurately estimate the likely uptake or cost of this measure.

#### ***Costs of removing carriageway roundels***

In the event that a speed limit changes or speed enforcement ceases at locations where speed limit roundels have been placed on the carriageway it will be necessary for authorities to remove those roundels. As highlighted through the consultation, the removal could potentially require the resurfacing of the highway. Whilst the amendments to TSRGD allow Traffic Authorities to place carriageway roundels on the highway in connection with sign 880, this is at their discretion and they are unlikely to chose to do so in the knowledge that the speed limit or need for enforcement is under review. This element of the proposals is therefore expected to place only very minimal additional costs on Traffic Authorities.

#### ***Visual intrusion of signs***

Whilst these amendments could result in the provision of additional signs at some camera sites, this will be at the discretion of local authorities. Therefore, it is not deemed likely that there will be significant impacts with respect to visual intrusion of road signs.

### **Benefits**

#### ***Reduced numbers of fixed penalties***

To the extent that the proposals improve compliance with speed limits at camera sites, there may be a reduction in the overall number of fixed penalty offences and prosecutions, and correspondingly in the work carried out by the police and the wider criminal justice system. It has not been possible to accurately estimate this effect, but it is likely that there will be a reduction in the number of offences detected where drivers pass safety cameras without accurate knowledge of the speed limit.

#### ***Prevention of road accidents***

It has not been possible to quantify the extent to which the amendments to TSRGD would reduce accidents, but the proposals should bring an improved respect for and compliance with speed limits,

which in turn should bring road safety benefits through reduced risk of death or injury to both motorised and non-motorised road users. Evidence has suggested that the greatest reductions in casualties would arise from interventions which reduce the speed of the faster drivers<sup>2</sup>. Recent evaluations of the National Safety Camera Programme for England and Wales have shown that enforcement of speed limits through safety cameras can significantly reduce vehicle speeds at camera sites. In particular, it has been found that the number of vehicles exceeding speed limits by 15mph fell by 51% at camera sites after the introduction of cameras<sup>3</sup>. There was also a reduction of 42% in the numbers of people killed or seriously injured at camera sites. This indicates that camera enforcement of speed limits is effective in reducing casualties at camera sites.

In 2006, exceeding the speed limit was cited as a contributory factor in 5% of all road traffic accidents, 7% of those involving serious injuries and 14% of those resulting in fatality: this equates to 381 fatal accidents, 1,519 serious injury accidents and 7,258 accidents overall<sup>4</sup>. These are likely to be under-estimates as other contributory factors, such as ‘loss of control’, or ‘careless, reckless or in a hurry’ may in some cases be an indication of exceeding the speed limit. Based on these accident figures, and the values given in table 3 of the Department for Transport’s ‘Highways Economic Note No. 1’, these accidents would be estimated to cost the economy £1.1bn including loss of output, human costs and health service costs associated with road casualties, as well as accident-related costs including police time, insurance administration and property damage. The TSRGD amendments are designed to reduce casualties by improving the compliance with speed limits at camera sites. It is estimated that the annual economic benefits of the National Safety Camera Programme in 2004 was £258m in 2004 prices.

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<sup>2</sup> Taylor M., Lynam D. and Baruya A, (2000) ‘The effects of drivers speed on the frequency of road accidents’ Transport Research Laboratory TRL Report 421, Crowthorne

<sup>3</sup> PA Consulting (2005), ‘The National Safety Camera Programme – Four Year Evaluation Report’  
[http://www.dft.gov.uk/pgr/roadsafety/speedmanagement/nscp/nscp/coll\\_the Nationalsafetycameraprogram/the Nationalsafetycamera progr4598](http://www.dft.gov.uk/pgr/roadsafety/speedmanagement/nscp/nscp/coll_the Nationalsafetycameraprogram/the Nationalsafetycamera progr4598)

<sup>4</sup> Department for Transport (2007), ‘Road Casualties Great Britain 2006’  
<http://www.dft.gov.uk/162259/162469/221412/221549/227755/contributoryfactorstoroadacc1802>

## Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

**Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.**

Type of testing undertaken	<i>Results in Evidence Base?</i>	<i>Results annexed?</i>
Competition Assessment	No	Yes
Small Firms Impact Test	No	Yes
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	Yes
Other Environment	Yes	Yes
Health Impact Assessment	Yes	Yes
Race Equality	No	Yes
Disability Equality	No	Yes
Gender Equality	No	Yes
Human Rights	No	Yes
Rural Proofing	No	Yes

## Specific Impact Tests

### Competition Assessment

These proposals do not have any competition impacts.

### Consultation with small business: the small firms' impact test

None of the respondents to the consultation exercise indicated that they were small businesses. However, the proposed amendments to TSRGD were supported by the Freight Transport Association, whose membership consists of companies of all sizes, and the Driving Instructors Association representing driving schools.

### Environment

It is unlikely that there will be any significant and quantifiable environmental impacts from the arrangements made available to highway authorities through the amendments. However, the proposals are designed to help achieve appropriate vehicle speeds which may also reduce associated emissions and therefore we could expect some positive benefits.

### Carbon Assessment

It is unlikely that there will be any significant and quantifiable environmental impacts from the amendments. However, the proposals are designed to help achieve appropriate vehicle speeds which may reduce associated emissions and therefore we could expect some positive benefits.

### Health

The proposals are designed to ensure greater respect for and compliance with speed limits which will in turn continue to reduce the number of road traffic collisions, injuries and deaths in which excessive speed is a contributory factor. Greater compliance will also reduce the risk to more vulnerable road users and improve the quality of life for local communities. More detail on the potential for health benefits are provided in the evidence base.

### Race equality Assessment

There are no race equality impacts to these proposals.

### Disability impact Assessment

These proposals do not have any disability impacts.

### Gender impact Assessment

There are no specific gender impacts to these proposals. However, Ministry of Justice statistics, *Motoring Offences and Breath Tests, England and Wales*, show that 82% of the people prosecuted for of speeding offences are male. It follows that male drivers are potentially more likely to be assisted by the improved signing that the amendments will enable.

### Human Rights



There are no Human Rights impacts to these proposals. A ruling by the Grand Chamber of the Human Court of Human Rights in June 2007 confirmed that cars have the potential to cause grave injury and that certain responsibilities therefore come with owning or driving a vehicle.

### **Rural proofing**

The majority of 30mph speed limits are on urban roads, whilst the majority of single carriageway roads subject to a 60mph speed limit are in rural areas. The available evidence indicates that a much higher proportion of vehicles exceed the 30mph speed limit (50%), than the 60mph limit (11%). Overall, the proposals are likely to assist road users in urban areas more than those in rural areas. Whilst these amendments could result in the provision of additional signs at some camera sites, given that elements are not mandatory, they will minimise unnecessary sign clutter and no significant adverse environmental impacts are expected in rural areas.