ROAD TRAFFIC SPEED

Memorandum Submitted by the Automobile Association to the Transport, Local Government and the Regions Committee

The wrong speed on the wrong road kills around 1000 people a year. We need to manage speed better. The key lies in defining the right speed limit for each stretch of road. There must be a system that people understand and “buy into” because they know it reduces death and injury. The clear safety message with universal appeal must not be diluted.

SPEED

A Summary of AA Views

* Road hierarchies should be more clearly defined, and linked to how a road is used – as a through route, a local distributor, a residential road, and so on.

* All speed limits should be reviewed in a formal programme with a timetable and budget. Getting the right speed on the right road is the single most pressing road safety issue – the benefits of a review are more than proportionate to the costs.

* Speed limits should be reconciled to the character of the road (and vice versa).

* Where the character of the road and the limits must be at odds, there must be an explanation of why the limit is what it is (e.g. “deceptive bends”).

* The link between the 30mph limit and streetlights should end - it is not understood.

* Repeater signs should always be permitted.

* The “derestricted” sign should go and be replaced with the speed limit in force.

* The national maximum speed limits should be retained at their present levels.

* The enforcement practice on motorways must not change without a further review of the speed limit.

* Cameras must not be deployed so that the enforcement of speed limits is perceived to be for revenue raising rather than casualty reduction.
* Where the hierarchy permits, lower speed limits can reduce casualties and improve the quality of life – but 20mph limits must be self-enforcing through investment in the streetscape.

* Authorities must implement speed limits that respect the integrity required of a national system. If they set speed limits too low and ignore police objections, they undermine motorists’ acceptance.

* Formal quality assurance processes, including audit, should be applied to all speed limits.

* Innovative approaches to speed limit signing, variable speed limits, and helping the driver adopt the right speed for the road should be researched and developed.
EXECUTIVE SUMMARY

The wrong speed on the wrong road kills around 1000 people a year. We need to manage speed better. The key lies in defining the right speed limit for each stretch of road. There must be a system that people understand and “buy into” because they know it reduces death and injury. The clear safety message with universal appeal must not be diluted.

1 INTRODUCTION

The AA represents people who are responsible motorists and for more than 90 years road safety has been at the heart of AA policy.

Few people in the UK do not have a view about speed. Many feel that vehicles travel too fast, particularly past their homes and the places they use for their leisure. Others feel that many of the speed restrictions applied to our roads are unrealistic and unnecessary. Some quite openly fall into both camps.

AA views are based on extensive research, most particularly the AA Foundation for Road Safety Research report What limits speed? Factors that affect how fast we drive. (1) Publication of an interim report was brought forward to July 1999 to assist the government’s speed review. In its research the AA looks at the views of people who drive, not people as drivers. In addition, the views of people who write, e-mail or telephone us are taken into account.

The single most important point the AA makes is that any changes to the way speed is handled have to win the support of the driver. There is every likelihood that measures that drivers can understand, and that they consider are reasonable, will be respected. Changes must be communicated carefully: many people still need to be convinced that the present arrangements are reasonable.

2 SPECIFIC QUESTIONS POSED BY THE COMMITTEE

2.1.1 The role of illegal and inappropriate speed in respect of causing crashes, and the severity of accidents;

It is likely that the role of speed in accidents will always be a moot point. Much of this will be because of the different methodologies used in accident studies.

Perhaps the best methodology used to date has been that developed in the AA Foundation for Road Safety Research Report urban accidents: why do they happen? (2) This is best explained in the following table analysing a fictitious accident where a driver hit a telegraph pole.
<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The immediate failure that precipitated the accident</td>
<td>Loss of control</td>
</tr>
<tr>
<td>2</td>
<td>A failure that increased the likelihood of the accident happening</td>
<td>Driving too fast for the situation</td>
</tr>
<tr>
<td>3</td>
<td>The road user behaviour or lack of skill that led to these failures</td>
<td>Lack of motor skills – braking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of motor skills – steering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of judgement speed/distance</td>
</tr>
<tr>
<td>4</td>
<td>The explanation for the failure or behaviour</td>
<td>Impairment – alcohol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poorly positioned street furniture</td>
</tr>
</tbody>
</table>

As one third of driver faults at level 2 involve driving too fast for the situation it seems reasonable to consider that this can be applied to all accidents – suggesting that one in three have speed as a contributory factor. Unfortunately, many different methods are used to determine causation, and it could be considered reasonable for any of the factors in the examples column to be deemed the “cause” of this accident. In all the Foundation methodology allowed 137 individual factors.

While it can be argued that speed is a significant contributory factor in around one third of all deaths and serious injuries other factors will determine whether someone is killed or seriously injured, in particular the EuroNCAP crash rating of the car and the crash protection features of the road. This is discussed further later in this memorandum.

### 2.1.2 The role of illegal and inappropriate speed in respect of reducing the quality of life in urban areas;

Conventional wisdom is that traffic speeds affect quality of life in urban areas. It is a major concern of residents – especially in areas with little or no crime. There is much research showing that those in deprived areas (and particularly children) suffer more road accidents than those in more affluent areas. It is an important issue of public policy whether scarce road safety resources should be allocated to areas where they counter quality of life issues for the articulate and politically active, rather than prevent accidents to the socially deprived.

It is also difficult to assess the way vehicle speed affects quality of life. It may be that people drive their children to school (possibly exceeding the speed limit in doing so) because the average speed of traffic on the route is too high. But it is possibly because they are scared of the occasional vehicle that travels at ridiculous speed while being driven in an outrageous manner. Similarly it may be because of fears raised by the behaviour of motorists in general on all types of road. Recent DTLR research has shown that 20 mph limits do not increase the number of pedestrians and cyclists even though the residents claim lifestyle improvements.
2.1.3 The consequences of illegal and inappropriate speed for urban design.

For more than 25 years new residential areas have been designed for a mix of car, pedestrian and cycle use, and for slow speeds. Road hierarchies have been a fundamental part of this design concept – access roads servicing individual homes and local distributor roads with no housing frontage and with higher vehicle design speeds.

These design principles have been successfully applied in other European countries to older residential areas. The character and environment of the roads have been physically changed to make speeding difficult and uncomfortable. In the UK, however, the focus for “traffic calming” has been to achieve reduced speed through cheap physical measures such as road humps and chicanes. These are very often unpopular with both local residents and drivers from outside the area and they do not enhance the character and environment of the area.

The UK policy on traffic calming and 20mph zones needs to be reviewed and new funding and guidelines developed to both reduce vehicle speeds on roads which are purely residential and to improve the local environment, all as part of urban regeneration. The techniques and skills are already available, all that is needed is a change in policy, good guidance and funding.

2.1.4 Rural Roads

It must not be forgotten that speed affects rural road too. Although serious and slight casualties continue to be dominated by those on urban roads, more people, and particularly more car occupants die on rural roads. Rural communities also suffer from reduced quality of life due to traffic, even though they may be wholly car dependent themselves. It is an area of concern that the public still sees speed as an urban problem and one that is concentrated around schools. This is not the case, but to many perception is reality.

The developing European Road Assessment Programme (EuroRAP) rates roads outside built up areas for the risk of traffic accidents that cause death or injury (3). It also highlights improvements that could be made to the road to reduce the likelihood of an accident or make those that do happen survivable. The system looks at roads in two ways. Firstly it looks at the historic data showing the death and injury rates on individual roads while secondly looking at the levels of protection offered to road users by the roads. This data can be used to select appropriate speed limits for roads taking the historical casualty record and the protection afforded by road design into account.

2.2 The availability and reliability of research on the consequences of, and reasons for, illegal and inappropriate speed, and in particular, the reasons for the very high pedestrian casualty rate

Generally the research into the consequences of illegal and inappropriate speed is available and sound. Research into the reasons for speeding is less common, and in
many ways the work carried out by Ross Silcock Limited on behalf of the AA Foundation for Road Safety Research – *What limits speed?* (1) is unique and groundbreaking.

There seem to be two groups of speeders: those who do so within what they may claim are accepted social norms; and those who do so extravagantly to seek thrills, to take risks or to show off.

The majority of drivers fall within the first group and is well explained by Ross Silcock. They drive at what they see as a safe speed for the road:

* their decision to do this is based on a complete failure to understand the peculiarities of the UK speed limit system;
* they cannot see why almost identical roads have different speed limits;
* they may well not know the national speed limits (some 50 per cent of drivers think the speed limit for a single carriageway is 50 and a dual carriageway 60);
* many of them think that motorways are the most dangerous roads, yet they see the limit there ignored by both drivers and the police;
* they almost certainly fail to understand the links between street lighting and 30 mph limits, and struggle to understand other areas of signing procedure.

Most of these drivers would probably support measures against speeding on roads near their homes.

The second group – the reckless - has to be tackled by enforcement and by punishment, and in the longer term by attitude change. Like the hard core of drink drivers they will not be influenced by advertisement, they believe that their driving is not made riskier by speed and they think that they will not be caught. It is quite likely that they also share with hard core drink-drivers a disregard for the law in general. This group constitutes a smaller proportion of speeding has attracted less attention in the media or in enforcement targeting.

The AA believes that all drivers bear a responsibility to other road users, particularly in respect of speed and on urban roads. But it is incorrect to blame speed for all pedestrian accidents. There are many other factors involved, not least the masking of pedestrians from drivers (and vice versa) by parked cars, the role of residential streets as important routes, the age and road layout of many of our inner city areas, and social deprivation in many of the older urban areas.

Additionally it must be remembered that 40 per cent of adult pedestrians killed are over the legal alcohol limit for drivers, and that the training of pedestrians has a role to play. Child pedestrians need to learn how to deal with roads, and elderly people – themselves a significant proportion of casualties – can also benefit from learning how to cope with their limitations.
Most sites with accident records have now been modified to improve safety and the emphasis has now moved to areas being tackled to stop almost randomly occurring accidents, and the role of each of the factors mentioned earlier in this paragraph has to be considered. Each of them provides its own challenge.

Possibly the most important research findings on pedestrian accidents is the link between deprivation and accidents. Ethnic minority groups are over represented in accidents. It is important that these areas, which are not necessarily the most politically influential or vocal, are those treated.

2.3 **The extent to which the problems associated with speed should be tackled by the following and what specific policies should be implemented**

2.3.1 **Better enforcement**

Enforcement is crucial to preventing speed-related accidents. It should be aimed to deter speeding where speed causes accidents, rather than to catch those who speed. The whole focus of speed enforcement should be to reduce death and serious injury and so help achieve the 2010 target.

Cameras must not be deployed in a way that the enforcement of speed limits is perceived to be for revenue raising rather than casualty reduction. It is to be regretted that many drivers now perceive that cameras are there to raise money. The decision to require cameras to be visible is a vital step in changing this perception but the change will take time to achieve.

*The enforcement practice on motorways must not change without a further review of the speed limit.*

2.3.2 **Road re-design and traffic calming;**

Where the use of the road permits, lower speed limits can reduce casualties and improve the quality of life – but mandatory 20mph limits should be self-enforcing through investment in the streetscape, as set out in para 2.1.3.

2.3.3 **Road re-classification;**

Road hierarchies should be more clearly defined, and linked to how a road is used – as a through route, a local distributor, a residential access road, and so on.

The aim should be to raise the design standards of a road to meet its place in the hierarchy, and not to lower the road’s classification in the hierarchy to meet its design shortcomings. Changes to the road classification must not provide a “bolt hole” for authorities with poor standard roads to simply make unreasonable speed limits that drivers won’t obey and that the police will find it hard to enforce.

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As an example, the goal should be that strategic roads should be subject to the national speed limit when away from settlements, and by-pass those settlements where substantial lengths of low speed limit road become necessary. Limits of less than 50 on these roads should be looked upon as a departure from the expectation of users and should over time be minimised, if not eliminated. Similar goals should be applied to other road groups.

It is also important that the classification of roads can evolve to take advantage of developments in road assessment. The European Road Assessment Programme (EuroRAP) (3) which is currently being developed will produce new techniques for assessing the safety of roads and the speeds appropriate to them that can in future have wider applications. It would be unfortunate if these new techniques either could not be used because of any new classification system, or required the development and introduction of a totally new system. The EuroRAP framework is very advanced in its development and could well be adapted for speed limit purposes.

2.3.4 Physical measures to separate pedestrians and cars (e.g. barriers);

These should be encouraged on heavily trafficked major roads or very major pedestrian routes. In most other places barriers can only be used to prevent road crossing at very inappropriate places. Street design should allow for safe use of residential and shopping roads by pedestrian and cars without the need for segregation.

2.3.5 Technology (e.g. through Intelligent Speed Adaptation and car designs which promote pedestrian protection);

Innovative approaches to speed limit signing, variable speed limits, and helping the driver adopt the right speed for the road should be researched and developed.

The AA supports the Government’s programme of researching and developing intelligent speed adaptation. It has much to offer, but should not be introduced in mandatory form. It should develop from being a voluntary aid to ensure acceptance and technical dependability before it can be proposed in a mandatory form.

2.3.6 Education to improve drivers’ and motor cyclists’ behaviour and pedestrian and cyclist awareness;

There is always a role for education in these areas, be it for drivers or pedestrians.

But an education-based approach is not likely to achieve much until all drivers understand the speed limit system. It is little use educating them in the dangers of speed and speeding while the basic system is inconsistent (possibly even with the training) and incomprehensible to many.
2.3.7 Changes to speed limits;

All speed limits should be reviewed in a formal programme with a timetable and budget. Getting the right speed on the right road is the single most pressing road safety issue – the benefits of a review are more than proportionate to the costs:

* Speed limits should be reconciled to the character of the road (and vice versa).
* Where the character of the road and the speed limit must be at odds, there must be an explanation of why the limit is what it is (eg “deceptive bends”).
* The link between the 30mph limit and streetlights should end - it is not understood by most drivers and it can be confusing to many in understanding what the current speed limit is.
* Repeater signs should be permitted where it is not obvious that the speed limit is 30mph. Improved signing should be a precursor of automatic camera enforcement.
* The “derestricted” sign should go and be replaced with the speed limit in force.
* The national maximum speed limits should be retained at their present levels.
* Authorities must implement speed limits that respect the integrity required of a national system. If they set speed limits too low and ignore police objections, they undermine motorists’ acceptance.
* Formal quality assurance processes, including audit, should be applied to all speed limits.

2.4 The extent to which relevant bodies are taking the right actions

2.4.1 Whether local authorities, DTLR, the Highways Agency, the police and Home Office are providing a co-ordinated approach to speed management, and what they should do

By and large there are improvements in this area. However, many of the points highlighted in 2.3.7 above have yet to achieve the prominence they deserve. Particularly important in this is the effective signing of limits. Nobody should be unaware they are committing an offence.

2.4.2 Whether the sentences imposed by magistrates and judges on those convicted of speeding offences have in all cases been appropriate and what other approaches ought to be considered

It is difficult to answer this question on the basis of informed understanding. There is a huge difference between “error “ or “misjudgement” speeding and deliberate or foolhardy or reckless speeding. This was to some extent accepted in the Home Office consultation on penalties. Unfortunately, distinction cannot be made on recorded speed alone – there is a great difference between a driver doing 60mph early in a 30mph limit because he has missed a sign, and one wilfully exceeding an urban limit by the same margin. The key is to endure that every speed limit is properly signed so that there can be no misunderstanding.
2.4.3 Whether motor manufacturers, the national press, TV programmes about motoring and advertisers have shown an appropriate attitude to speed, and how they should change

Research by the AA 9 years ago suggested that around 15 per cent of car advertising inappropriate to the then guidance of the Advertising Standards Authority on car advertising. As a result of the work the ASA introduced a car specific code, similar to those developed by the Independent Television Commission. The AA is not aware of any recent research on car advertising and its effect on behaviour.

The role of speed management strategies

We need to manage speed better. The key lies in defining the right speed limit for each stretch of road. There must be a system that people understand and “buy into” because they know it reduces death and injury. The clear safety message with universal appeal must not be diluted, particularly by introducing arguments about emissions that are not well understood and accepted.

Links:

1. What limits speed? Factors that affect how fast we drive July 1999 FDN27

2. Urban accidents: why do they happen? Contributory factors in urban road traffic accidents April 1990 FDN 4

3. European Road Assessment Programme (EuroRAP) UK results