

THE SLOWER SPEEDS INITIATIVE

POLICY BRIEFING No.3

July 2002

SELECT COMMITTEE REPORT ON ROAD TRAFFIC SPEED

'The effect of widely applying well-researched and understood measures to improve enforcement, engineering and education would produce very impressive results both in reducing casualties and transforming the quality of life of millions of people. Even spreading best practice to all parts of the country would have an enormous effect. Many of the very high total of deaths and serious injuries to which inappropriate speed contributes could be avoided. Total deaths could be reduced to under 1,000 per year. The Government's target of reducing the number of people killed and seriously injured by 40% could easily be exceeded. However, progress to date is slow, and the Government's new rules about the location of safety cameras threaten to undermine this target.'

A WORLD WHERE SPEED MANAGEMENT IS TAKEN SERIOUSLY Road safety a national transport priority, effective use of speed cameras, new speed limits with a new preventative approach to death and injury, increased funding for traffic calming and better guidance to local authorities on speed management, road crashes recognised as a major public health issue, at-work driving in the remit of the Health and Safety Executive, traffic police numbers maintained, road traffic policing in the national policing plan, immediate implementation of stiffer penalties for speeding. This is a world where speed management is taken seriously, and it emerges from the House of Commons Transport, Local Government and the Regions Committee inquiry earlier this year. Its report is a welcome and robust pep talk to a Government which has lost the plot on transport.

'When lives are at stake the Government should attempt to lead public opinion.'

The Committee's examination of the contentious topic of speed has generated a wealth of up-to-date information and position statements, as well as 50 detailed recommendations to the Government. The main subject of this inquiry is the impact of speed on road safety and public health. There is limited discussion of its impacts on transport choice and the urban environment. There is no discussion of the role of speed management in reducing emissions – especially CO₂ – and congestion. Nonetheless, the Committee's findings are a milestone for the understanding that speed management must be central to a sustainable transport policy. This briefing summarises key points and serves as a guide to the document (numbers in parentheses are those of paragraphs in the report).

Slow progress in implementing road safety policy and its low priority for the Government prompted this inquiry. The Committee was specifically concerned at the Government's reneging on its commitment to the EU Pedestrian Safety Directive, failure to implement the Road Safety Strategy (which they warn is in danger of collapse), failure to bring forward increased penalties for road traffic offences and the restrictive guidelines undermining the safety camera scheme (8).

There are five overarching recommendations regarding safety cameras, how speed limits are set, traffic calming and other measures to ensure drivers comply with speed limits in built-up areas, the means of funding these measures and local authority responsibilities for speed management. In addition, major points are made about the need for leadership and joined-up government, the role of the Home Office, and the neglected public health dimension

of road safety and traffic speeds. The role of the media and vehicle design also generated recommendations.

We report on the Committee's recommendations below and highlight some useful facts produced by the inquiry.

Confirmation of the speed/crash relationship is the Committee's starting point. 'Illegal and inappropriate speed is a major contributory factor in crashes and casualties both in urban and rural areas' (14). The Committee found overwhelming consensus on the danger and impacts of excessive and inappropriate traffic speed. There is no longer any significant dispute about the contribution of speed to road crashes. Only two organisations, the RAC Foundation for Motoring and the Environment [sic] and the Association of British Drivers 'fundamentally disagreed' with the evidence

presented by experts from the Transport Research Laboratory (TRL), transport academics, the AA and the Government (14, 13).

WHY SPEED IS 'SUCH A DANGER'

The two main reasons why 'speed is such a danger' (11) are easy for most people to understand – at higher speeds there is less time to make adjustments for errors and the unexpected; and crash severity increases with speed.

- 'Hit by a car at 40 mph, nine out of ten pedestrians will be killed.
- Hit by a car at 30 mph, about half of pedestrians will be killed.
- Hit by a car at 20 mph, nine out of ten pedestrians will survive.' (12)

However, such is the propaganda and lack of awareness that one third of drivers think the chances of a 40 mph collision killing a pedestrian is 50% or less instead of the 90% that it actually is (12). This may help to explain why 70% of them ignore the urban speed limit and why they consider speeding to be a trivial offence.

TRL summarised years of research (13):

- each one mph reduction in mean traffic speed is associated with a 5% reduction in accidents; the exact reduction depends on the type of road;
- at a speed of 25% above the average speed, the risk of a crash rises more than 500%;
- the higher the average speed on a given type of road, the more crashes there are; and the bigger the spread of speeds, the more accidents;
- measures to slow traffic improve safety.

THE MAIN RECOMMENDATIONS

1. Relax safety camera partnership guidelines. The Committee wants the National Safety Camera Scheme to be improved by allowing local and police authorities discretion on siting safety (speed and red light) cameras, including at areas where there is a risk of crashes. The whole country should be covered by 2004 (180).

Local police forces participating in the scheme for netting off fines to cover the costs of enforcement must abide by guidelines set by the Department for Transport and the Home Office. The current guidelines stipulate that cameras must be located where a number of deaths or serious injuries have

occurred, the sites must be well-signed and the camera housings are to be painted yellow (55). The guidelines were strongly criticised in evidence to the Committee (56-57):

- many casualties are not clustered, particularly those involving pedestrians and cyclists;
- the message to drivers is that they are free to break the law away from camera sites;
- highly visible cameras will cause drivers to slow down and speed up again;
- the decision had not been based on scientific analysis and there had been no assessment of the consequences;
- there was no evidence that painting cameras yellow would reduce accidents but there is evidence that covert cameras are more effective;
- the rules discourage preventative strategies since people have to be killed or injured for a camera to be installed.

'The new rules about the visibility and location of cameras are unreasonable. ... People will die as a result. Police and local authorities should decide where to locate cameras and whether they should be visible. ... The Department of Health should be on the Project Board for the Safety Camera Scheme to ensure that public health issues are fully taken into account in the decision it makes' (61).

The Slower Speeds Initiative and Transport 2000, with the backing of the Institution of Civil Engineers, are seeking a judicial review of the guidelines and particularly welcome the Committee's findings and recommendations which entirely support our case.

SPEED CAMERAS ARE POPULAR

Contrary to their portrayal in the national press and by motoring organisations, speed cameras are popular with the public (52). In local press reporting of safety camera schemes, 90% of stories were positive, 6% neutral and only 4% negative (117). There is also a 'clear demand from public ... to see more police officers out on public roads' (62).

2. Issue new guidance to local authorities on setting speed limits. The Committee wants the guidance, promised in 2000 in the Road Safety Strategy, made a priority, especially the introduction of a 30 mph limit for villages.

The Committee agrees that 'speed limits are a mess': 'The failure to set and enforce the right speed limits is a major factor in deaths and injuries, and in particular in the high pedestrian casualty rate in urban areas' (69).

'Current guidance [Circular 1/93] to local authorities about how to set speed limits does not take sufficient account of safety and has led to limits higher than is safe' (70).

'A new system of speed limits is required as a matter of urgency. ... A national framework for speed assessment and a new classification of the urban and rural road network could describe in more detail how those limits should be applied. The Government should publish as a priority revised Guidance to local authorities on setting

local speed limits and principles for speed management. The Guidance should also offer information on the range of interventions available to local authorities to act as preventative measures in advance of crashes and injuries occurring. Local authorities should subsequently be guided by a national framework for determining appropriate vehicle speeds on roads and by a new hierarchy of roads defined by their function and quality in urban and rural areas' (73).

'New limits should: - be understood, consistent, respected; and - take into account a wider range of factors than the speed of traffic, including the need to protect all road users' (71). The guidance should allow local autonomy to reflect local circumstances (96).

... speed limits are a mess ... a new system of speed limits is needed as a matter of urgency

The Committee has set out its proposed guidance to local authorities for speed limits for cars (75). Although this is highly encouraging in that, with the exception of dual carriageways and 'good quality single carriageway A roads', the direction is downward, it clearly pre-empts the 'subsequent 'national framework for determining appropriate speeds'. This is perhaps the greatest weakness in a document which seeks to spur the Government to action and wants evidence-based policy. (See 'How

20 MPH LIMITS, QUALITY OF LIFE AND TRANSPORT CHOICE

Quality of life 'Road traffic speed ... reduces quality of life. We are not going to regenerate our towns and cities and make them attractive places to live while they are dominated by fast moving vehicles. In the country too villages are severed and country lanes, once enjoyed by those taking a stroll, or riding a horse or bicycle, are now dominated by traffic travelling at high speed' (4).

Transport choice Government policy should aim to create urban areas where people can walk safely because speeds have been reduced. (31) 'It is hard to see how the Government will meet its target of trebling cycling by 2010 unless the speed of traffic is reduced on routes which cyclists use' (26).

- European experience shows that 20 mph limits are the single most important policy measure to promote strong growth in walking, cycling, public transport and inner city regeneration (27).

- The UK has few low speed limits. The main road safety contrast between the UK and Netherlands is extent of 20 mph zones (80).

- *20 mph limits clobber casualties.* Hull's 20 mph zones have reduced total casualties by 56%, child casualties by 64% and deaths and serious injuries by 90% (80).

- ACPO (The Association of Chief Police Officers) supports 20 mph zones and has retested all its equipment to ensure they are fully enforceable (81).

has the Select Committee determined that their proposed speed limits are appropriate?', below).

Some key points on speed limits

Villages The 30 mph limit in villages should be implemented without delay. Enforcement measures should be based on consultation with villagers to ensure compliance. Rural communities 'should also decide which settlements are villages' (89). The Committee was critical of Highways Agency performance and makes a specific recommendation that the Agency should introduce 30 mph in all villages on roads for which they are responsible.

20 mph in towns The Initiative argued for a new urban default limit of 20 mph with exemptions where appropriate. The Committee has

recommended an urban 20 mph limit for 'many residential areas [and] some mixed routes' and in the 'vicinity of schools' in both urban and rural areas (75; and see table below). Moreover, they acknowledge that 'the only uncertainty' regarding 20 mph limits 'is about how extensively they should be employed' (81).

They recommend that the Government 'should encourage local authorities to make more use of 20 mph zones, enforced by suitable engineering measures. The measures should be area wide to avoid displacement. They should concentrate on accident prevention and improving the quality of life, and should not only be introduced as an ad hoc response to serious crashes' (81).

TRAFFIC CALMING WORKS

Traffic calming produced average mean speed reductions of 43% (to average speeds of 16 mph) and average casualty reductions of 59% in Nottingham (77).

- Displacement of traffic from calmed areas to adjacent streets can be avoided 'if measures are employed over a whole area' (78).

- 'Traffic calming schemes and area wide safety management schemes have the potential to prevent 25% of all casualties in urban areas if fully applied.' This would prevent 50,000 casualties a year, a third of them pedestrians (97).

- The Highways Agency installed only eight traffic calming schemes in 2000-02. It has not included Traffic Calming Guidance in its *Design Manual for Roads and Bridges* (150).

Home Zones The Government should 'publish the results of the home zone pilot projects as soon as possible. If successful, the Government should fund them and support their widespread introduction' (82).

Motorway speed limit There is no case for an 80 mph limit on motorways (94). According to evidence from the DTLR, an 80 mph limit would mean more deaths because of higher mean speeds and greater speed differences between lorries and other vehicles. Higher speeds would do little to

Recommended Speed Limit (mph)		Type of Road	
Slower Speeds Initiative	Select Committee	Urban	Rural
10	-	Home Zones	Home Zones
20 variations where appropriate	20	many residential areas, some mixed routes, vicinity of schools	vicinity of schools
	30	main roads	villages
	40	major outer urban roads	
20 for country lanes (i.e., roads where two cars cannot pass) otherwise probably 30	40		'C' and unclassified roads (assumes some current 'C' roads become 'B' roads)
40	50		poorer quality 'A' and 'B' roads
45-50	60		good quality single carriageway 'A' roads
55	70		dual carriageways
55-60	70		motorways

reduce journey times: 'on the congested motorways of England an 80 mph limit might well increase [journey times] because it would create an uneven flow.' There was no discussion of the impact of motorway speed limits on CO₂ emissions.

The Committee recommends getting rid of the widely misunderstood derestricted sign. All speed limits should be clearly signed (91).

3. Roads should be re-engineered to ensure compliance with speed limits and to improve the pedestrian environment. The Committee acknowledges the benefits of traffic calming, the success of its extensive use in Europe, particularly in reducing pedestrian casualties, and its cost effectiveness (77, 80 and 97).

They recommend traffic calming to enforce 20 mph and 30 mph limits. The most dangerous urban roads are those where it is not possible to segregate pedestrians and motor vehicles. Government guidance to local authorities 'should recommend that particular care is taken to ensure that these routes are suitably engineered to enforce the speed limit' (35).

4. Local transport funding should become dependent on speed reduction measures. Funding should be linked to having speed management strategies in place, which should give priority to pedestrians in urban and rural areas (173). 'The principle problem is that too few councils have made road safety and speed reduction a priority' (140).

This is a very welcome recommendation, which makes it all the more important that a means of determining appropriate speed limits should be available to local authorities for the purposes of drafting their speed management strategies.

5. Road safety should be a priority for the Ten Year Plan which would identify funds for a national programme to re-engineer and re-design our roads. In Labour's first year in Government, the TRL estimated that the

cost of full application of traffic calming and area wide safety management schemes would be £3bn and would reduce road casualties in urban areas by 25%. In order to provide the funds in the Ten Year Plan, 'this estimate [should] be updated and ... an estimate ... made of the cost of measures to reduce casualties in rural areas' (97).

COST OF CRASHES

The annual cost to the Health Service of dealing with crashes is £540 million. The economic value to society of preventing road casualties is around £12 billion and when the costs of police work, insurance and damage to property are included, the total value rises to £17 billion. Dealing with speed related crashes would save society £100m a week (16). Meanwhile, 'those who speed only suffer a small part of the costs' (39).

'The DTLR should provide funds for further demonstrations projects, including Safer City Projects in each region in the country, and similar projects in rural areas' (172).

GLOUCESTER SAFER CITY

This road safety trial project spent £5 million over 5 years on a preventative approach to road safety. The central feature is a speed management strategy based on a road hierarchy of through, mixed and access only routes. On mixed routes vulnerable road users have been given higher priority. 20 mph zones have been extensively introduced in residential areas. First results from the scheme show that, city-wide, deaths and serious injuries have been reduced by over a third, adult pedestrian casualties by 22% and child pedestrian casualties by 13%.

'The Government has to give leadership. It needs to make it very clear that speeding is unacceptable' (page 6). The Government must stop worrying about its portrayal 'by a section of

HOW HAS THE SELECT COMMITTEE DETERMINED THAT THEIR PROPOSED SPEED LIMITS ARE APPROPRIATE?

In the table we compare the Committee's proposed speed limits with provisional appropriate speed limits calculated by Plowden and Hillman in *Speed Control and Transport Policy* (1996, London: Policy Studies Institute) and adopted by the Slower Speeds Initiative. The limits are probably too high and the authors have recommended controlled trials to confirm them. There is one of only a few comprehensive attempts to determine speed limits that would be optimal for society as a whole. It was based on balancing time penalties of slower speeds against savings of crashes, fuel and vehicle operating costs.

A more elaborate framework, developed in the late 90s as part of a Europe-wide study, MASTER (Managing Speeds of Traffic on European Roads), takes other factors, such as emissions and noise, into account. The underlying principle for the framework is that 'driving speeds should reflect the socially desirable balance of all impacts of speed, and equitable distribution of these impacts between different groups in the population.' (Kallberg, V-P, et al, 1998, *Recommendations for Speed Management Strategies and Policies*, MASTER Deliverable 12, VTT Communities and Infrastructure, p6). The framework is used to determine what the acceptable speeds are, according to this principle of a socially desirable balance.

The Initiative recommended to the Select Committee that a speed assessment framework, using a range of impacts, should be developed and trialled by the Department for Transport working in association with groups of local authorities on a regional basis so that comprehensive guidance on speed limit setting and speed management could be in place before the next round of Local Transport Plans. Local authorities would then have a framework for a systematic review of all local speed limits which could proceed in association with changes to national speed limits. Their reviews would serve as the basis for developing speed management strategies. These in turn would determine the type and scale of interventions required, the amount of re-signing and re-engineering, education and enforcement and, thus, the overall costs. The Committee's recommended limits imply either a) that local authorities will go through a process of setting, signing and engineering speed limits for the same roads twice, or b) that somehow, in advance of work on the 'national framework for determining appropriate vehicle speeds on roads', the Committee already knows what the appropriate speeds are and the national framework will merely confirm their insight. Changes to speed limits in the past have been few and hard fought. For speed limits to be consistent and accepted, as the Committee wishes, their basis should be completely transparent. The limits the Committee recommends should be subjected to the test of a socially desirable balance and equitable distribution of all the impacts of speed.

'If any disease killed as many people as die on the roads there would be an outcry.

There would be a national campaign to insist that the Government do something about it.'

the motoring lobby and in parts of the press' (181). Instead, Ministers should defend evidence-based policy against media attacks (175). Leadership is also necessary to get local authorities to take action. 'When lives are at stake the Government should attempt to lead public opinion' (175).

The Association of Chief Police Officers pointed out that changing attitudes to drink driving had been brought about by 'over 25 years of consistent policy from several governments and police service, with consistent educational messages, with a consistent enforcement policy' (108). Speeding needs the same approach.

There should be a National Speed Management Strategy (171). Its aim would be to make the public more aware of the role of speed in crashes, correct misinformation in the press and establish a programme to change attitudes to speeding. It would also set local authority targets for speed reductions and spread good practice in speed management.

The Committee wants to see joined up government, with 'a consistent approach from the whole of Government, including DTLR, the Home Office, the DfES, the DTI and the Department of Health. Road safety must be a central part of the many strategies which these Departments are drawing up' (174).

The starting place is with the Department of Health and the recognition that road deaths are a major public health scandal whose importance is overlooked in the National Health Service Plan.

'Road deaths are one of the most important public health issues ... Other diseases kill more people, but few kill more young people in the prime of life, and therefore make such a contribution to the years of life lost' (152). 'If any disease killed as many people as die on the roads there would be an outcry. There would be a national campaign to insist that the Government do something about it' (178).

The Committee calls on the Department of Health to address the problem of underreporting by contributing to injury data collection. The Committee proposes a national road crash database (161). The National Health Service plan should deal with road death and injury specifically.

The Committee has noted the wider effects of speed in discouraging physical activity (30) and the serious health inequalities in the burden of casualties: 'Poor people, and especially poor children, are disproportionately likely to be killed or injured as pedestrians' (19).

The Home Office must come on board. The Home Secretary received the strongest criticism for the 'mixed messages emanating from the Government' (164). Mr Blunkett is considered to have played a key role in the restrictive rules for safety cameras, failed to make traffic policing a priority, failed to implement the proposals in the

2000 Consultation Paper on Road Traffic Penalties and pressed for an 80 mph limit on motorways (165). Unless road traffic policing is included in the National Policing Plan, it will be impossible to get every police force to take it seriously (143). 'There should be no further reduction in the numbers of traffic police' (63).

Existing penalties for speeding are inadequate. The Home Office delay in implementing proposals is 'unacceptable' (67). There should be legislation in the next session of Parliament to bring in the new system of stiffer fines and more rapid disqualification for the more serious speeding offences.

With Lord Chancellor's department, the Home Office must issue clearer guidance to magistrates on disqualifying speeding drivers (68).

CRIMES AND PUNISHMENT

Four times more people are killed on our roads than are murdered. Meanwhile the Home Office is proposing to abolish the casualty reduction performance indicator for police forces. The threat of disqualification is the 'real deterrent' to speeders, AA surveys show. (64)

The Health and Safety Commission must also get involved. 'The HSC would be negligent if it failed to extend its activities to this most important safety issue' (156). The Health and Safety Executive should take up these duties. Employers should get clearer guidance on managing road risk. The Committee proposes an inquiry into work-related road death and injury.

HEALTH AND SAFETY AT WORK ON THE ROAD

'Company car drivers have a 30 to 40 per cent greater involvement in road accidents than those driving for domestic purposes. The victims of "at work vehicle accidents" include not only company drivers and passengers but other road users ...' (154) 'Crashes which occur while drivers are working are very common, and deaths caused in this way are probably the largest single cause of work-related fatalities' (156).

SERIOUS CONCERNS ABOUT MEDIA LINKS WITH MOTOR INDUSTRY

The media are hooked on car advertising: 'In 2000 total expenditure on "motoring" display adverts in national newspapers was £307 million, 12.2% of the total. 15 of the top 50 advertisers in national newspapers in 2000 were car manufacturers' (127). 'The evidence to this inquiry shows that there are serious concerns about the link between motor industry advertising and journalism.' (130)

The role of the media Media campaigns 'against safety cameras and traffic calming are in danger of undermining key planks of the Government's safety policy' (128). The BBC did not consider 'addressing problems of speed and road safety as part of the Public Service Broadcasting Remit.' They offered no explanations of 'why road deaths and safety are not widely reported' (125). The Committee has recommended a specific inquiry into the impact of the media on road safety policy and its implementation (131)

Vehicle design 'Intelligent Speed Adaptation offers the opportunity to put an end to illegal and inappropriate speed' (103). The Committee advocates strong Government support for the technology, with continued funding for research and the development of a digital road map and establishing a Europe-wide requirement that all new vehicles sold from 2013 should have an ISA capability. A mandatory system could be in place by 2019.

While we welcome this recognition that the ultimate solution is in the design of vehicles speed-limited by law, we argue that ten to twenty years is too long to wait. A driver-operated device, not dependent on satellites and digital maps, could be fitted now. The driver's speed selection would be indicated with lights on the outside of the vehicle for all other road users – and the police – to see.

The Committee does want the Government to encourage the voluntary use of speed limiters by fleet managers, supported through tax incentives (103). This is an important recommendation which could have immediate benefits for road safety and company costs and productivity.

The Committee also recommends a new type approval for more accurate speedometers redesigned to make drivers more aware of the 30 mph limit (99).

However, they did not make recommendations regarding wider aspects of vehicle design, in particular, the legality of manufacturing and selling cars capable of well over the national speed limit. We strongly welcome the recommendation made by the Royal Society for the Prevention of Accidents that 'the European Commission, national governments and the motor industry should work together to develop restrictions on the top speeds and power of new cars and motorcycles' (120).

A DECISIVE STEP INTO THE FUTURE

The Committee's work should ensure that the importance of speed to road safety and public health will now receive serious attention in all departments of Government. Their acknowledgement of the impacts of speed on travel choice and the urban environment demands follow up with serious official consideration of the role of slower speeds in reducing congestion, pollution and dispersed development.