

## Speeding: The Continuing Challenge

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This document sets out how a robust national speed management strategy would be a major step forward towards cutting the continuing toll of death and injury on Britain's roads. The first section sets the scene, updating the picture since the 1996 PACTS' document 'Taking Action on Speeding', and the following section sets out a list of recommendations for action by the Government in order to tackle the problem.

### The scale of death and injury

- **Road crashes are the eighth largest cause of death in the world. By 2020, they will be the third largest.** In 2000, a fifth of the deaths of children and young people aged between 5 and 19 were due to road crashes; this was about two thirds of accidental deaths for this age group (DTLR, 2001a).
- **3,409 people were killed**, 38,155 people were seriously injured and 278,719 people were slightly injured on Britain's roads during the year 2000 (DTLR, 2001a). DTLR acknowledge that an appreciable proportion of non-fatal incidents are **not reported to the police**. TRL research recommends that in order to take account of the differences between police and hospital recorded data, the number of seriously injured casualties in national casualty data should be increased by a factor of 2.76 and the number of slight casualties should be increased by 1.70 (Simpson, 1996).
- The DTLR estimate that the **value of preventing injury crashes during 2000 would have been £12,170million** in 2000 prices and values (DTLR, 2001b). This figure includes lost output, medical and ambulance costs and human costs. **When the total costs of police work, insurance and damage to property are added for all crashes, including damage-only, this figure swells to £16,959million.**
- While the DTLR attempt to put a notional monetary value on the human costs of road casualties, no monetary value can truly equate to the pain of bereavement and injury. A study has revealed that **90% of the families of dead victims and 85% of the families of disabled victims experienced a significant permanent decline in their quality of life** (EFRTV, 1995).

### Why speeding matters

- Speed management is central to road safety. **Speed is the biggest single contributory factor in road crashes.** Last year alone speed contributed to over **1,100 deaths and over 12,600 serious injuries** in Britain (DTLR, 2001c).
- **Excess speeding**, is breaking the speed limit, for any particular vehicle and road (and is more frequent in urban areas), while **inappropriate speeding** means travelling too fast for the conditions, within the speed limit (and is a more common problem in rural areas), (Taylor et al, 2000).
- **There is a strong link between the likelihood of an accident occurring and the speed at which drivers or riders travel.** In urban areas, 36% of the people killed or seriously injured are pedestrians and children make up 41% of pedestrian casualties in urban areas. 31% of pedal cyclist casualties are children.
- Higher speed drivers are associated with a significantly greater accident involvement than are slower drivers. **Reducing the speeds of the fastest drivers would yield greatest benefits in reducing death and injury on the roads** (Taylor et al, 2000). During the first year of the pilot cost-recovery safety camera scheme, speeding by more than 15 mph over the limit at camera sites was virtually eliminated, and on average there were 47% fewer people killed and seriously injured at the camera sites.
- Not only is the likelihood of being involved in a crash increased with faster speeds, but the **severity of the injuries sustained by both those people inside and outside a vehicle also increases with speed.**

### The challenges and opportunities

- **At 35 mph you are twice as likely to kill someone as you are at 30 mph** (DTLR, 1999). Already 90% of pedestrians hit by a car travelling at 30 mph will be seriously injured. Nearly half of them will be killed (DTLR, 2000). The change from mainly survivable injuries to mainly fatal injuries takes place at speeds of between about 30 and 40 mph, (Ashton, 1981).
- **Speeding is endemic.** The majority of drivers and riders regularly break the speed limit.

- In 2000 **66% of car drivers exceeded the 30 mph limit in urban areas** - with 32 per cent travelling faster than 35 mph (DTLR, 2001d). **According to self-reporting, 85% of respondents admitted to exceeding the speed limit** on occasion, and there was general agreement that "everyone did it" (Silcock et al, 2000).
- A Metropolitan Police survey of London roads with a 30 mph limit, found that 63% of all drivers exceed the speed limit. The survey found that 10% were driving over 50 mph, and that a very **small percentage (but still hundreds of drivers) exceeded 70 mph on 30 mph roads**, (Slower Speeds Initiative, 2001).
- Tackling the problem of the danger of speeding traffic requires a dual aim of (1) reducing the average speed, since the faster the traffic moves on average the more crashes there are, and (2) reducing the spread of speeds around the average, since the accident frequency increases exponentially as the spread of speed increases (Taylor et al, 2000).
- **As a general rule, a 1 mph reduction in average speed results in an average 5% reduction in crashes.** Broken down in more detail, the 5% reduction in accident frequency is more like 6% for urban roads with low average speeds, 4% for medium speed urban roads and lower speed rural main roads, and about 3% for the higher speed urban roads and rural main roads (Taylor et al, 2000). **This relationship means that even marginal reductions in average speeds can result in major road safety gains.**
- Indeed Taylor found that applying reasonable but modest assumptions about the speed reductions achievable on various road types, it can be shown that the **annual saving of 23,000 injury crashes (200 deaths, 3,500 serious injuries) could be expected, resulting from a reduction in average speeds** (across the whole network) **of just 2 mph.**
- **Reducing speed does not mean significantly longer journeys.** Results from the research into Intelligent Speed Adaptation (Carsten, 2001) showed that there was little change in journey time using vehicles equipped with External Vehicle Speed Control. ISA has little impact on average journey times but reduces maximum speeds. The research by Taylor et al demonstrated that reducing maximum speeds would yield greatest benefits in reducing death and injury.

## What should be done

1. **Speed management should be approached strategically, in the context of wider objectives (emissions, economy, social inclusion etc.). Speed management requires active partnership between national government, highway authorities, the police and all types of road users. This should be formulated into a national speed management strategy.**

Across the various Departments, the Government has many different targets and strategies and it will require commitment to ensure that speed management is carried forward as a priority amongst these. Practitioners will require guidance on how to manage any conflicting policy demands. Joined-up thinking must be robust to ensure that the speed management strategy is not allowed to falter due to short-term backlashes and changes in the political env