Think inside the box

With only a little tweaking, Labour's congestion plans could also solve the speeding problem

Every year the figures inch downwards, and every year they are greeted as a triumph. Britain now has the best record for road safety in Europe. Only 3,508 people were killed on our roads last year, and only 171 of them were children. Only 33,707 were gravely injured. Rejoice, just bloody well rejoice.

Among the dead, this year, was a friend of mine. He was cycling home from a meeting about making the roads safer for cyclists. He was run down by a young man who had just passed his test. Those of us who refuse to drive are among the most likely to be killed by a car.

The comparisons have been made before, but I'll test your patience by repeating them. The people who die on our roads every year would fill 30 commercial airliners. The deaths caused by cars in Britain since 1945 outnumber the deaths of British soldiers during the second world war. Since March 2003, 61 British servicemen have died in Iraq; as many people die in just one week of carnage (was there ever an apter word?) on the roads. One in 17 of us will be killed or seriously injured in a road crash.

So why do we put up with it? Partly, of course, because we think there's not much more that can be done. More speed cameras, more humps, stiffer penalties for bad drivers will all save lives, but we appear to accept that some people will always drive like lunatics. I did for a couple of years after I was deemed fit to sit behind a steering wheel. It is after all what driving, for many people – especially young men – is all about: the freedom to behave like an idiot.

But there is something that can be done. There is a technological solution to what is

essentially a technological problem. It could start to be deployed immediately. Indeed, with the minimum of political pressure, it could become an almost cost-free product of quite another scheme.

Last week, the government published its plan for dealing with congestion. Within 10 years, it proposes, every car should be fitted with a communications box. With the help of a global positioning satellite, the box will send a signal to the toll collectors showing where it is and how far it travels. Cars can then be charged according to where they are. The Department for Transport hopes that, by costing roads according to their use, it can discourage people from crowding the choke points.

It may well be a necessary means of preventing gridlock. But there is another, more powerful argument in favour of the scheme, which almost everyone seems to have missed. With just a little modification, it could also be used to cut fatal accidents by nearly 60%.

The communications box will contain a digital map of the road network. To turn it into a road safety device, you need only add the local speed limits and connect it to the engine management system. When the box detects that the speed limit has dropped, it warns the driver, blocks the accelerator and applies the brakes. Local sensors can tell the digital map when weather conditions are bad, and bring the car's speed down to match them.

The system – called Intelligent Speed Adaptation – has been tested by Leeds University's Institute For Transport Studies. When the system is mandatory (in other words, when the driver can't override it) and can take account of the weather, it could reduce serious accidents by 48% and deaths by 59%. This isn't just because you are more likely to hit someone if you are speeding; you are also more likely to kill them once you have made contact. The energy dissipated in a collision rises with the square of its speed. A person hit by a car at 35mph is twice as likely to die as a person hit by a car moving at 30.

Needless to say, this proposal, like almost every attempt to save lives, is anathema to those who claim to speak on motorists' behalf. The Daily Mail (they must have thought long and hard about this one) calls the idea "Big Brother in the boot". The Society of Motor Manufacturers and Traders claims it will prevent motorists from "accelerating out of danger". Their spokesman is plainly in need of driving lessons: he seems to have confused the pedal on the right with the one in the middle. The Automobile Association warns that the system will "restrict freedom", which is, of course, precisely the point. The website pistonheads.com is already urging motorists to find ways of sabotaging it.

So what do these people want? They say they want to get rid of speed humps and speed cameras. They say they want the government to stop snooping on them and

fining them. They say they want the police to concentrate on catching muggers. Well, this system permits all these things to happen. It prevents speeding without policing or punishment. So why aren't they demanding that it is adopted immediately? Because what they really want, of course, is to allow people to continue driving without social restraint.

There's nothing new in all of this. In A Tale of Two Cities, the aristocrats in pre-revolutionary Paris exhibit their disdain for the rest of humanity by driving their carriages as fast as they can. "The complaint had sometimes made itself audible," Dickens wrote, "that, in the narrow streets without footways, the fierce patrician custom of hard driving endangered and maimed the mere vulgar in a barbarous manner. But ... in this matter, as in all others, the common wretches were left to get out of their difficulties as they could." The kings of the road still insist on their right to dispose of the lives of their subject peoples.

Happily, these morons belong to a minority. A Mori poll in 2002 suggested that 51% of drivers would welcome compulsory speed limiters in all new cars. And so they should. As soon as it becomes impossible to break the speed limit, the entire culture of driving changes. The other fool might remain a fool, but there isn't much he can do about it. He can't tailgate you, he can't overtake you on a blind bend (the satellite system could produce a different speed limit for every metre of road), he can't play Jenson Button after closing time. The fact that the high-performance car becomes redundant in these circumstances may help to explain why the Society of Motor Manufacturers and Traders isn't too keen on the idea.

Unlike the road charging scheme, there are no implications for civil liberties: the car receives signals from the satellite, but does not transmit. The only freedom the system restricts is the freedom to endanger other people's lives. If cars are going to be fitted with communications boxes anyway, the cost of incorporating speed controls will be minimal. The savings, the Leeds study suggests, run into tens of billions of pounds.

So we don't have to call for very much. Just the tweaking of a scheme that the government plans to introduce anyway. And the prevention of only a couple of thousand deaths a year.