

Sustainable Development Commission

Response to The Department for Transport's *A Safer Way: Consultation on Making Britain's Roads the Safest in the World.*

July 2009



Introduction

The Sustainable Development Commission (SDC) is the Government's independent adviser on sustainable development, reporting to the Prime Minister, the First Ministers of Scotland and Wales and the First Minister and Deputy First Minister of Northern Ireland. Through advocacy, advice and appraisal, we help put sustainable development at the heart of Government policy.

The SDC welcomes the Department for Transport's consultation document *A Safer Way - Consultation on Making Britain's Roads the Safest in the World*. There are strong synergies between improving safety and increasing wider sustainability outcomes. In order to maximise these it is necessary to put sustainable development thinking at the heart of new policies.

It is not just "likely that we will be living in a more carbon constrained world", as the consultation document states, it is a certainty. Government's statutory commitment is to reduce GHG emissions by at least 34% (possibly 40% if this is agreed in Copenhagen) by 2020 and 80% by 2050. Within this context there are many opportunities to achieve multiple policy aims. By approaching the issue from a sustainable development point of view, the Department's strategy to address road safety can simultaneously address issues as diverse as climate change, health, and child well-being as well as reducing congestion and improving economic performance.

The SDC advocates a hierarchical approach to transport. This provides a priority order with which to address transport issues:

- 1). Demand reduction
- 2). Modal shift to more sustainable modes - walking, cycling and public transport
- 3). Efficiency improvements
- 4). Capacity increases - only if necessary once options 1-3 have been fully implemented.

This approach has a strong synergy with improving road safety. Reducing the need to travel is likely to reduce the number of casualties on the roads as well as reducing transport emissions and congestion. The most sustainable modes of travel, walking and cycling, are intrinsically safer since they are less likely to cause death or serious injury either to those using the mode or those around them. The fact that walking and cycling currently have higher casualty rates per kilometre travelled than driving is a result of the danger imposed on these modes by motorised transport rather than the modes themselves being dangerous. Creating a shift to walking and cycling and away from motorised transport, particularly in urban environments, would remove much of the danger and health impacts imposed on society by motor transport - not just through collisions but wider issues such as air pollution and noise. In addition, evidence suggests that increasing levels of cycling is an effective way of reducing the risk per kilometre cycled.¹

¹ *Safety in Numbers* - www.ctc.org.uk/resources/Campaigns/CTC_Safety_in_Numbers.pdf

Public transport too, has a much better safety record than private vehicles, as well as having a lower overall environmental impact. Finally, improving the efficiency of our transport networks can also reduce accidents - the most congested constituency (City of London and Westminster) is also the most accident prone and three of the top ten constituencies for accidents are in the top ten for congestion².

This document sets out the SDC's response to the specific consultation questions. We would be happy to work with the Department for Transport as they further develop their thinking on this.

Vision and targets (Chapters 3 and 8)

1. Do you agree that our vision for road safety should be to have the safest roads in the world? (Chapter 3)

Yes. Previously our record in improving road safety was admired by other countries. We have now fallen behind in some respects. Given the huge costs to society of road deaths and injuries, it is vital that we aim for the highest standards. However these standards must be met whilst simultaneously enabling and encouraging people to choose the most sustainable modes of transport such as cycling and walking, which may currently have higher risks of death or serious injury due to the environment in which they are undertaken which is currently dominated by motorised transport.

2. Do you agree that we should define a strategy running over twenty years to 2030, but with review points after five and ten years? (Chapter 3)

Yes. It makes sense to set out both a long term strategy and for specific review points to be built into the strategy. However we are concerned that the strategy does not take sufficient account of the need for dramatic reductions in greenhouse gases which are mandated by the Climate Change Act over this period.

3. Do you agree that our targets should be to reduce:

- **road deaths by at least 33 per cent by 2020 compared to the baseline of the 2004–08 average number of road deaths;**
- **the annual total of serious injuries on our roads by 2020 by at least 33 per cent;**
- **the annual total of road deaths and serious injuries to children and young people (aged 0–17) by at least 50 per cent against a baseline of the 2004–08 average by 2020;**
- **by at least 50 per cent by 2020 the rate of KSI per km travelled by pedestrians and cyclists, compared with the 2004–08 average? (Chapter 8)**

No, the overall target or vision should be zero road deaths and injuries. This is the case in Sweden (Vision Zero), Denmark (one death is one death too many), and Norway, where there is a similar policy.³ The Scottish Transport Minister also recently stated "Zero road deaths must always be our

² Source: KeepMoving's Government website

³ Ending the Scandal of Complacency: Road Safety beyond 2010 – House of Commons Transport Committee

ultimate objective” and announced targets of 40% reduction in deaths and 55% reduction in serious injuries by 2020.⁴ In order to have the safest roads in the world, Britain will need to adopt a similar vision.

Experience from industry leaders is that setting and championing a zero target for accidents is the most effective single action that an organisation can take to address safety issues.

The vision should be a society in which no-one is needlessly hurt or killed on the roads. Within that vision it is appropriate to have interim targets measuring progress. Given the urgent need to address climate change we need to dramatically increase levels of walking and cycling (fundamentally safe modes of transport in themselves) and reduce our reliance on motorised transport in the future. Given that motorised transport is by far the greatest cause of danger (accounting for over 99% of all pedestrian deaths for instance⁵) it would be appropriate to have more ambitious targets.

It is vital that reductions in deaths and serious injuries of pedestrians, cyclists and children are not achieved through reductions in the numbers of journeys made by foot or by bike or the ability of children to travel independently or play outdoors.

For this reason we welcome the fact that pedestrian and cyclist targets are now rate based. The department must ensure that the target for reductions of deaths and serious injuries to children and young people are achieved by creating environments in which the danger to children posed by road traffic is minimised.

Currently the UK has a comparatively poor ranking for child road safety (ranking 17th of 26 countries).⁶ There must be a particular focus on reducing the dangers to children.

Figure 8.2 indicates a 22% reduction could be achieved through drink-drive, engineering and secondary safety plus campaigns such as Think! As is highlighted, young drivers are greatly over-represented in fatality statistics. There appears to be a serious problem with the culture of cars and speeding as indicated in paragraph 2.24 with almost half of all car drivers apparently believing it to be acceptable to speed in 30mph areas and over 70% of drivers admitting to speeding. This needs to be tackled much more firmly. This causes the greatest problems in residential and urban areas, precisely where policies are seeking to encourage greater levels of walking and cycling.

Data from 20mph limits indicates reductions in deaths and serious injuries of 70% can be achieved⁷ and there is great potential from reducing speed limits and increasing enforcement. Even on non-urban roads that are used by cyclists and pedestrians there may be significant potential for casualty reduction through speed limit reduction.

⁴ <http://news.scotsman.com/scotland/Tough-new-targets-to-put.5367804.jp>

⁵ UK road safety statistics (2000-2004)

⁶ *Children's traffic safety: international lessons for the UK* - N Christie, S Cairns, H Ward, E Towner

⁷ <http://www.swov.nl/rapport/R-2009-06.pdf>

We believe it would be appropriate for all the proposed targets for 2020 to be reductions of at least 50%. This would meet the criteria set out in paragraph 3.9 for targets to be memorable and clear, while still being both challenging and credible.

4. We are proposing a set of indicators in order to help us to monitor performance (Appendix A). Do you believe these cover the right areas? (Chapter 8)

None of the proposed Key Performance Indicators relate directly to children. There should be additional indicators:

- Rate of killed or seriously injured child pedestrians per 100 million kilometres walked.
- Rate of killed or seriously injured child cyclists per 100 million kilometres cycled.

It is also essential to have accurate data on the number of journeys made and the distances travelled by foot and by bicycle. Without this data it is impossible to assess the effectiveness of measures to promote these modes. We therefore suggest that guidance and funding should be provided such that each local authority is able to establish much more accurate and comparable measures for these modes.

Perceptions of pedestrians and cyclists about their safety should also be consistently measured to provide a lead-indicator of safety. It also provides a vital piece of data to assess the impact of perceived road safety on increasing cycling and walking as travel modes.

Context (Chapters 2, 3 and 4)

5. We have identified a number of factors that may affect our ability to deliver road safety improvements in the future world we are planning for. Do you think we have taken account of the key risks and opportunities? Are there others you would add? (Chapter 3)

The most important addition we would make is for the Department of Transport to recognise that it can and should play a part in controlling demand for motorised transport and that this will impact road safety. One example of this would be how the Department chooses to respond to the recent Regional Funding Advice proposals. Increasing the proportion of funding allocated to Smarter Choices measures (some of which can reduce transport demand), as well as cycling, walking and public transport schemes as opposed to road building schemes is likely to lead to overall reductions in casualty numbers.

6. We think that the key challenge for road safety from 2010 is better and more systematic delivery, rather than major policy changes. Do you agree? (Chapter 4)

We support the move to a systems approach to road safety. However we believe the fair deal outlined at the start of Chapter 4 needs modification. In particular, paragraph 4.2 - Obligations on Government should include:

- Encouraging responsible and sustainable travel choices

This should include ensuring that the lowest carbon and most sustainable modes of travel are more attractive and affordable than other options. It should also recognise that increasing levels of walking and cycling is likely to lead to improvements in road safety.

Equally Paragraph 4.4 - Government's offer to the road user should include:

- To support safer and more sustainable travel behaviours

7. This consultation document sets out the current evidence on the key road safety challenges. Do you agree with our analysis? Would you highlight any others? (Chapter 2)

We would add that there appears to be some correlation between child-wellbeing and the ability of children to travel independently. Countries such as Sweden and the Netherlands not only have excellent overall road safety figures, but also have high levels of reported child-wellbeing in marked contrast to the UK.⁸

The UK is also facing an obesity epidemic with the recent Foresight report estimating costs could reach £49.9 billion by 2050. One of the best ways of addressing this is to increase daily activity through cycling and walking.

The UK should aim not only for the safest roads in the world but ensure that this is achieved in ways which also ensure high levels of health and wellbeing.

New performance framework (Chapters 4 and 8)

8. We are proposing a number of measures to support the effectiveness of the road safety profession. Do you think they will be effective? What else might need to be done? (Chapter 4)

No response

9. Do you agree that an independent annual report on road safety performance, created on an annual basis, would be a worthwhile innovation? (Chapter 4)

Yes. This would be a useful addition to the existing published figures. However the report should cover a wider scope than simply road safety. We recommend an annual report on "The Health Impacts of UK Roads". The report would then cover not only road safety deaths and injuries but also aspects such as air quality, noise, and levels of active travel.

One aspect that the Department for Transport should investigate is the potential road safety benefits from increased levels of cycling and walking. Research could particularly focus on whether drivers who are or become regular road cyclists exhibit better driving behaviour and attitudes.

It is possible that habitual daily motorists become desensitised to speed whereas people who regularly walk and cycle are more aware of the dangers posed by speeding vehicles and are thus more likely to obey speed limits when driving.

⁸An overview of child well-being in rich countries

http://www.unicef-icdc.org/presscentre/presskit/reportcard7/rc7_eng.pdf

An additional question on future surveys of driver attitudes which identifies whether the respondent is a regular road cyclist could provide some initial insight in this area.

10. Do you agree that the Road Safety Delivery Board should be tasked with holding Government and other stakeholders to account on the implementation of a new national road safety plan? (Chapter 8)

Yes. It would be appropriate for a body to have the power to hold those with responsibility for delivering road safety measures to account. However rather than focusing purely on road safety, we suggest that this body should also be responsible for reporting on the wider health impacts of road use such as air quality, noise and monitoring levels of active travel as discussed in our response to question 9. This will avoid any potential 'unintended consequences' resulting from a simple focus on accident reduction.

Roads and local authorities (Chapter 5)

11. Do you agree that highway authorities reviewing and, where appropriate, reducing speed limits on single carriageway roads will be an effective way of addressing the casualty problem on rural roads? Are there other ways in which the safety of rural roads can be improved? (Chapter 5)

We agree that reducing speed limits on single carriageway roads where evidence indicates that the existing speed limit is too high will be effective. However we are concerned that local highway authorities may not reduce speed limits where it is necessary due to public resistance. In these instances the Department for Transport may need to intervene to ensure that all roads have speed limits appropriate to road layout and which achieve the required casualty reductions.

12. How can we most effectively promote the implementation of 20 mph zone schemes in residential areas? What other measures should we be encouraging to reduce pedestrian and cyclist casualties in towns? (Chapter 5)

The most effective way of promoting the implementation of 20mph zones would be a nationwide social marketing campaign highlighting the existing evidence base that demonstrates they reduce deaths and serious injuries by about 70%. The campaign should prepare the public for the fact that their local council is likely to be introducing widespread 20mph zones. The campaign should present a positive image of the benefits of 20mph zones, showing lively street scenes from existing examples and interviewing residents about the benefits.

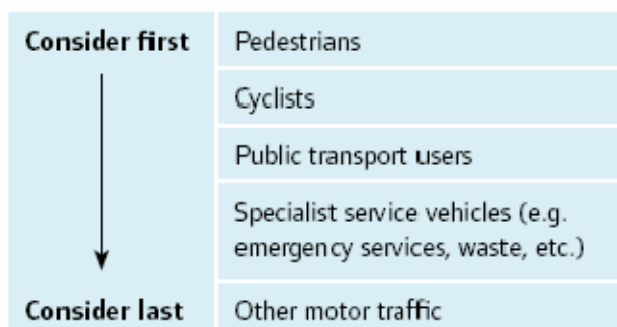
The campaign should seek to achieve a change in public attitude towards speeding in urban areas in a similar way to the campaigns for seat belt wearing and drink driving.

Once 20mph zones have been widely introduced, recent research from the Netherlands⁹ indicates that while these roads continue to show excellent safety improvements (70% reduction in deaths and serious injuries), some roads in these areas may need to be further re-designed to encourage drivers to

⁹ <http://www.swov.nl/rapport/R-2009-06.pdf>

comply with speed limits. They emphasise the need for the speed limit to feel 'credible' to the driver and advocate clarifying a design standard.

The Department's own "Manual for Streets" provides useful guidance in this respect, including the need for streets to be designed with priority given to pedestrians:



Consideration should be given to the need to introduce changes to road design and traffic calming measures to achieve high compliance with speed limits.

Further measures would be better enforcement of urban speed limits through the use of advanced camera technologies such as the recently approved perimeter cameras measuring the average speed of vehicles across an area wide speed limit zone.

The Department should mandate the fitment of Intelligent Speed Adaptation (ISA) technology to all new vehicles as soon as practicably possible. The potential benefits have been shown to be very significant as well as publically acceptable ("56% of participants approving of compulsory fitting of ISA to all new vehicles")¹⁰ and this technology should be given high priority.

A key requirement should be that the driver is given the means to ensure that his vehicle does not exceed the speed limit in urban 20 and 30mph zones. Once this technology is widespread, then arguments against the use of cameras to enforce urban speed limits are greatly reduced since it would then be possible to avoid 'accidentally' exceeding the limit.

A key additional measure which would reinforce this and reduce pedestrian and cyclist casualties would be a change in road traffic law. The UK is one of only four countries in Western Europe where an injured pedestrian or cyclist has to prove a driver who collided with them is liable for their injuries before they can obtain compensation. If pedestrians and cyclists injured on the road were presumed entitled to civil compensation for injury damages, assuming their actions were not illegal, it could promote improved driver behaviour and a shift to these sustainable modes. For children, the elderly and the infirm entitlement should be presumed regardless of their actions.

To further reduce pedestrian and cyclist casualties in towns we advocate a significant increase in the funding available to create high quality cycle routes both on road and, where necessary, separate off-road routes . We welcome the Department's recent publication of *Cycle Infrastructure Design* however

¹⁰ *Intelligent Speed Adaptation – UK, Final Report 2008 – Carston et al*
<http://www.dft.gov.uk/pgr/roads/vehicles/intelligentspeedadaptation/>

in much of the UK spending levels for cycling average £1 or less per person whereas best practice might cost at least five times that.

Finally we are concerned that the Department currently estimate increased fuel consumption and emissions will result from reducing 30mph speed limits to 20mph. We are aware of real-world evidence from at least two sources which indicates that fuel economy may improve^{11, 12}. In addition we question whether the Department has included in this calculation the likely mode switch away from driving to cycling and walking which would further reduce fuel consumption. If this is not the case, we recommend that this should be included to ensure accurate appraisal of the potential benefits.

13. How can we provide better support to highway authorities in progressing economically worthwhile road safety engineering schemes? (Chapter 5)

No response

Vehicles (Chapter 6)

14. What should Government do to secure greater road safety benefits from vehicles?

As mentioned in the response to question 12, the introduction of Intelligent Speed Adaptation (ISA) will be a key way of securing greater road safety benefits from vehicles. What is especially significant about this technology is that by regulating vehicle speed it provides road safety benefits to non-car users as well as the car occupants.

Much of the impetus for improved vehicle safety has been achieved through the European New Car Assessment Programme (Euro NCAP) ratings system which has led to vehicle safety becoming a higher priority in vehicle purchasing decisions. However this has led safety improvements to be focused on protecting vehicle occupants rather than other road users.

Market forces involved in vehicle purchase decisions are unlikely to provide as strong an incentive for improvements which may not directly benefit the vehicle purchaser, for example measures to improve Euro NCAP pedestrian impact scores and ISA (where the benefits may be perceived as marginal).

Recently released Euro NCAP results for six new vehicles gave scores of 78-92% for occupant protection in frontal impact tests. However the same vehicles scored only 32-64% for pedestrian protection¹³. Of particular concern is that two vehicles given 5 (out of 5) star overall ratings should be able to achieve this while scoring only 31% and 32% for pedestrian protection.

The SDC believes that Euro NCAP ratings should increase the focus on protection of vulnerable road users and particularly on accident prevention. There are known difficulties in accurately assessing real world

¹¹ <http://www.roadpeace.org/documents/RoadPeace%2020mph%20Information%20Sheet.pdf>

¹² <http://www.vtpi.org/calming.pdf>

¹³ <http://www.euroncap.com/latest.aspx> - Audi Q5, Honda Jazz, Hyundai i20, Kia Soul, Peugeot 3008 and Suzuki Alto results.

vehicle crash performance¹⁴ so it would make sense to increase the emphasis on technologies that reduce the likelihood of crashes such as Intelligent Speed Adaptation (ISA), collision avoidance systems and Electronic Stability Control (ESC).

The SDC welcomes the fact that the new Euro NCAP overall safety ratings now include pedestrian protection and safety assist scores (which include “speed limitation assistance”). However we are concerned that the current rating system requires only a 25% score for pedestrian protection in order to achieve 5 stars and that the weighting system allocates 70% to adult and child occupant protection with only 20% to pedestrian protection and 10% to safety assistance systems.

In addition it will become increasingly difficult for a not-for-profit organisation such as Euro NCAP to promote safety advances such as Intelligent Speed Adaptation; this is because such advances are likely to increase costs for the motor industry, yet be of limited appeal to new vehicle consumers. We feel that legislation is likely to be required to ensure that pedestrian impact protection levels are universally high on new vehicles and that measures to reduce the likelihood of crashes, such as Intelligent Speed Adaptation (ISA), become standard fitment.

15. Do you agree that, in future, crash avoidance systems will grow in importance and will have the potential to greatly reduce casualties?

Crash avoidance systems may have a significant role to play to help reduce casualties. However this is likely to be primarily on motorways and dual carriageways, which have better safety records than urban roads. These systems are already available on higher specification vehicles with collision avoidance, lane keeping, blind spot radar, night vision systems and even driver alertness monitors and speed limit sign reading already on the market.¹⁵ These systems can be expected to ‘trickle down’ to the lower end of the market as the technology becomes cheaper. Much of the introduction of this technology will be market driven.

In complex urban environments however it is unlikely that such systems can be developed which will greatly reduce casualty numbers. It is therefore more important that the Department focuses on behavioural change and creating a shift in societal attitudes such that speeding and irresponsible driving become socially unacceptable and more sustainable travel modes which impose less danger on society (walking, cycling and public transport) become more popular.

16. How can we best encourage consumers to include safety performance in their purchasing decisions?

The existing NCAP safety rating system for new vehicles has been effective in making safety a consideration in purchasing decisions. Provided information on the benefits of vehicle safety systems to the purchaser is presented in a clearly understandable way, there may be little further that can be done.

However for safety improvements for which the primary beneficiaries are not the vehicle occupants it will be necessary to use stronger measures as discussed in our answer to question 14.

¹⁴ Euro NCAP, a safety instrument http://www.swov.nl/rapport/Factsheets/UK/FS_EuroNCAP_UK.pdf

¹⁵ Mercedes E-Class specification – Geneva Motor Show 2009

Behaviours (Chapter 7)

17. We have highlighted what we believe to be the most dangerous driving behaviours. Do you agree with our assessment?

Yes. However the list in paragraph 7.23 should also include “Aggressive or intimidating driving / road rage”. Anecdotally this appears to be an increasing problem with law abiding and safe road users being subject on occasions to intimidation and aggressive driving. Example victims include drivers who obey the speed limit, cyclists who maintain the correct road position (well away from the kerb) and pedestrians who have right of way crossing at junctions.

18. What more can be done to persuade the motoring public that illegal and inappropriate speeds are not acceptable behaviours?

As mentioned in our response to question 12 this will require a concerted nationwide advertising and publicity campaign. The recent advert emphasising the effects on a speeding driver who killed a child is a step in the right direction. This is likely to be a more successful way of changing behaviour since it makes clear the negative impact on the life of the driver.

Recognising that the most effective publicity emphasises the impact on the individual rather than those around them, the focus should continue to emphasise the potential negative impacts on speeders themselves, highlighting the range of emotional trauma and guilt they are likely to feel. Punishment for speeders and irresponsible drivers should include re-education potentially including meeting victims of road traffic accidents and bereaved families. The Department should investigate the potential for restorative justice measures to reduce re-offending amongst speeders and irresponsible drivers.¹⁶

This publicity must go hand in hand with greater enforcement to demonstrate that the issue is taken seriously. Currently speed limit enforcement is limited and many drivers still routinely break speed limits. Average speed camera technology provides an opportunity to improve this, linked to increased levels of fines and penalty points for speeding.

Intelligent Speed Adaptation (ISA) will help ease enforcement by giving drivers an easy way of ensuring that they do not exceed speed limits.

Finally in the urban environment, new developments should be designed to minimise the need to travel and to prioritise sustainable travel modes. Existing residential areas may also need redesigning in line with “Manual for Streets” guidance to ensure 20mph speed limits are respected.

¹⁶ New Zealand Court-Referred Restorative Justice Pilot: Evaluation Crime and Justice Research Centre – Triggs (2005) found significantly lower reconviction rates for traffic offenders who attended a restorative justice conference.

19. What more can be done to encourage safe and responsible driving?

West Sussex County Council is running an innovative scheme entitled "Operation Crackdown" (<http://www.operationcrackdown.org/>) which enables members of the public to report anti-social driving and abandoned vehicles. The scheme has been successful with over 13,000 vehicles reported since August 2007.

The scheme could be rolled out nationwide, encouraging members of the public to take an active role in reducing anti-social driving. This could be promoted as part of the publicity campaign regarding the lowering of speed limits in residential areas, helping to re-enforce the message that speeding and irresponsible driving are socially unacceptable.

20. Should more be done to reward good driving? If so, what?

There is no need to reward good driving. Cars confer many benefits to their users whereas the vast majority of the costs associated with their use are borne by others¹⁷. There is no need of further reward.

The Department's main aim in this respect should be to make good driving standards an expectation of society. Equally, irresponsible road use such as speeding should become as socially unacceptable as drink-driving.

The area in which more should be done to reward good behaviour is encouraging more sustainable transport choices such as walking, cycling, car sharing and public transport use. We believe the Bikeability training is an excellent example, however further encouragement should be given to promote these behaviours:

Schemes such as that in Westminster offering free adult cycle training should be made available nationwide.

There should be more positive advertising encouraging cycling and walking - emphasising the health benefits and convenience. The CTC, the National Organisation for Cyclists' recent "Safety in Numbers" campaign demonstrates clearly that increasing levels of cycling can result in lower absolute numbers of deaths and serious injuries to cyclists.¹⁸

There should be greater promotion of car sharing, again emphasising the benefits to those who car share; for example evidence suggests that car sharers are half as likely to be involved in an accident as those driving solo.¹⁹

There should be investment in "Smarter Choices" measures, particularly "personalised travel planning" (PTP) to encourage people to consider alternatives to car use. Public transport has a much better safety record than private car use and the results from the Sustainable Travel Towns, which all made extensive use of PTP have shown significant increases in bus use as well as cycling and walking.

¹⁷ Car Sick – Lynn Sloman

¹⁸ *Safety in Numbers* - www.ctc.org.uk/resources/Campaigns/CTC_Safety_in_Numbers.pdf

¹⁹ Privilege Insurance's data reported on Liftshare's website: <https://www.liftshare.com/news.asp?ns=41&tb=q>