DfT child road safety strategy 2007

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1. Executive Summary

1. Children are amongst our most vulnerable road users. We have made great efforts over several decades to reduce the number of children killed or injured in road accidents. We have achieved a big reduction, but, sadly, it remains true that road accidents are one of the major causes of death and injury for children and young people. Each and every death of a child is a tragedy, so we need to redouble our efforts and make sure we reduce the number of casualties still further.

2. Our target is to reduce by 50% the numbers of children aged 0-15 killed and seriously injured in Great Britain, by 2010, compared with the average for 1994-98. We are well on track to meet or exceed this target. By 2005, the number of children killed or seriously injured was already 49% below the 1994-98 baseline. But we cannot be complacent and must continue our efforts to ensure child casualties keep falling up to 2010 and beyond.

3. This child casualty target is more challenging than our overall target to reduce all fatal and serious injuries by 40% by 2010. This is because child pedestrian casualty rates in Great Britain have historically been higher than in many other European countries, while our overall casualty rates have been amongst the best. While we have improved, there is still a long way to go.

4. When we set the road safety targets for 2010 in 2000 we said we would review progress every three years. The Department's second three year review of the road safety strategy Tomorrow's roads: safer for everyone, sets out a range of measures to improve road safety. While not specific to child road safety, these more general measures to improve road safety for all will also contribute to reducing the number of child casualties.

5. Many organisations - Government Departments, local authorities, police and other emergency services, health services, schools charities and others - are involved in the work to reduce the number of child road casualties. It is vital that we all work together to take forward this strategy to reduce the number of children killed and injured in road accidents.

6. There are wider initiatives to improve the health and safety of children that have a common interest with our aim of reducing child road accident casualties. These include the Every Child Matters initiative, the Healthy Schools programme, the Travelling to School project and Sure Start.

7. This strategy considers those areas that are a priority for further action, including where we have made less progress towards the target. The main part of this strategy covers the areas for which DfT is responsible. It also summarises the position in Scotland and Wales. The decline amongst the 11-15 year olds has only been around half that of younger children. And boys are overrepresented in the pedestrian and cycling statistics. There are substantial regional variations between the casualty rates for children, with London seeing the biggest casualty reductions. While we have made progress in reducing casualties

amongst child pedestrians and car passengers, these remain the two largest groups of all child casualties. Pedestrians make up 61% of children killed or seriously injured. Around three quarters of child casualties are in urban areas, but in rural areas there is a higher proportion of fatal and serious child car occupant casualties.

8. Research informs the measures taken to improve the behaviour of all road users, the design of cars and infrastructure. It lies behind the key messages put out to target audiences such as teens or primary-school aged children, as well as drivers and other road users. This report details research under way or recently completed for the Department, as well as key recent reports from other sources.

9. The strategy looks at measures to improve child road safety under six different themes. These are education, training and lifelong learning; publicity; highway engineering, environment and planning; vehicle engineering and secondary safety; legislation and enforcement; and school journeys. Overarching issues that affect them all and that need to be taken into account when taking forward the actions, include regeneration and partnership working.

10. Much valuable work has already been done by many people and organisations around the country to achieve the casualty reductions seen so far. That work is continuing. The strategy outlines 20 specific actions for the Department and our partners for improving child road safety between now and 2010, building on this existing work and developing some new priorities. The 20 actions are listed in the table below. The main priorities for new or additional efforts are:-

- Promoting effective practical child pedestrian training such as Kerbcraft.
- Promoting good practice in road safety education.
- Encouraging broad local partnerships to deliver co-ordinated road safety activities.
- Providing road safety messages to children and other road users, through Think!
- Make more of parents and peers in delivering road safety messages to children.
- Encouraging wider use of 20mph zones in areas where children are active.
- Co-ordinating road safety and school travel activities.

Action	**Delivery**	**Target Groups**
Education		
1 - DfT encourages wider use of Kerbcraft and similar measures and will do more to encourage wider take-up following the evaluation of the pilot schemes. We will put in place a dissemination strategy to encourage local authorities in continuing to provide Kerbcraft training.	DfT, LAs	Age 5-7 Pedestrians Parents Teachers / schools LAs Disadvantaged areas
2 - DfT will continue to promote good practice in the delivery of Road Safety Education (RSE), in the light of findings from the current research projects on RSE and pre-driver education.	DfT	All ages All modes Parents, friends and peers Teachers / schools LAs, police and fire

3 - DfT will work with DfES, Cycling England, the Cycle Training Standards Board, local authorities, RoSPA, schools, and cycling organisations to ensure the new national standard is introduced more widely in the next few years and that the standard will continue to ensure safe priorities are followed.	DfT, LAs, cycling groups	Age 7-18 Cyclists Teachers / schools LAs
4 - DfT will look for new opportunities to deliver road safety messages to parents and guardians and will encourage local partnerships to implement them.	DfT, DfES, DoH, LAs, schools, health authorities	All ages All modes Parents, friends and peers Teachers / schools LAs, police and fire, health and social authorities
5 - DfT will research the scope for promoting child-based approaches to promoting road safety within peer groups.	DfT	All ages All modes Parents, friends and peers Teachers / schools
6 - An audit of all educational and publicity resources produced by the DfT will be carried out in 2007 and they will be reviewed annually to ensure they are well targeted and effective.	DfT	All ages All modes Parents, friends and peers Teachers / schools LAs, police and fire
7 - DfT will revise and reissue Arrive Alive - A Highway Code for Young Road Users, following launch of the revised Highway Code in mid-2007.	DfT	Age 7-11 All modes Teachers / schools LAs, police and fire
8 - DfES will help promote safety tips and programme materials through its curriculum guidance.	DfES, schools	All ages All modes Teachers / schools
9 - Road Safety Officers, police, fire and health services should work together to co-ordinate their activities in schools and elsewhere. They should ensure that officers who work with schools and other bodies are trained to do so. All should ensure that road accident prevention is considered when establishing accident prevention programmes or healthy schools schemes as well as in the design and delivery of road safety interventions and packages.	LAs, RSOs, schools, police, fire and health services	All ages All modes Teachers / schools LAs, police and fire, health and social authorities
Publicity		

10 - The Think campaign will continue to promote child road safety, taking account of evidence-based prioritisation for targeting and marketing.	DfT	All ages All modes Teachers / schools LAs, police and fire, health and social authorities
11 - DfT will research the appeal of the hedgehogs campaign for 5 to 11 year olds. We will consider what publicity would be most effective for this age group and whether anything different is needed for 10-11 year olds.	DfT	Age 5-11 All modes Teachers / schools LAs
12 - DfT will deliver cycle safety messages effectively, as part of our wider road safety publicity for children, making the most of links between safety and cycling promotion.	DfT, Cycling England	All ages Cyclists Teachers / schools LAs
13 - DfT will develop publicity targeted at parents and guardians, including those who drive, as part of our wider publicity on child road safety. Road safety messages will also be included in our publicity on school travel initiatives.	DfT, DfES, schools, LAs, school travel advisors, RSOs	All ages All modes Parents Drivers
Highway engineering, environment and planning		
14 - DfT is monitoring and evaluating the road safety benefits of the NRSI, Inner City and Mixed Priority Route demonstration projects, including issues of ethnicity and diverse communities. We will disseminate good practice in 2007 and will update it after the projects and evaluation are complete.	DfT, LAs	All ages All modes Parents Teachers / schools LAs, police and fire, health and social authorities Different ethnic and socio-economic groups Disadvantaged areas
15 - DfT will continue to monitor local authorities' performance of child road safety audits.	DfT, LAs	All ages All modes LAs

16 - Local authorities and the Highway Agency should include child road safety in all highways works. In particular, they should consider wider use of 20 mph zones in areas where children are active, traffic calming measures in these zones and other areas, and changes to residential street layouts to minimise through traffic.	DfT, LAs, HA	All ages All modes LAs HA
Vehicle engineering and secondary safety		
17 - DfT is committed to continued involvement in on going European and harmonised World Wide initiatives to improve car design, including in-car design and restraints as well as pedestrian protection. We shall continue to monitor in-car design features such as airbags, seat strength and luggage retention devices through analysis of field investigations and accident studies to consider both the potential for injury and implications for future amendments to regulations.	DfT, vehicle and CRS industry	All ages Car occupants Pedestrians Cyclists Vehicle manufacturers
18 - DfT monitors cycle helmet wearing rates, with a new survey taking place during 2006, with the results published in 2007. Our road safety publicity for teenagers and for younger children includes messages to encourage cycle helmet wearing.	DfT, cycling groups	All ages Cyclists Parents, friends and peers Teachers / schools LAs
19 - DfT is reviewing the suitability of adult restraints for children in minibuses and coaches in the light of the recommendation from this project.	DfT	All ages Bus and coach occupants Teachers / schools LAs Vehicle manufacturers
Legislation and enforcement		
20 - Local agencies should work together to ensure that speed limits are observed and crack down on local problems such as disregard of the law applying to School Crossing Patrols and other poor driving offences.	LAs, police, fire, schools	All ages All modes LAs, police Drivers
School journeys		

21 - From 2007 Local Authorities must consider the travel needs of all pupils and promote sustainable travel to school. All schools must have a robust School Travel Plan by 2010, which could include	Schools, DfT, DfES	All ages All modes Parents, friends and peers Teachers / schools LAs

2. Introduction

11. Great Britain has one of the best records on road accident deaths in Europe and around the world, but our record is not so good for child pedestrians, although it has improved. In 2005, 28,126 children aged 0-15 were injured in road accidents in Great Britain. 3,331 of these were seriously injured and 141 were killed. These include 11,250 child pedestrian casualties, of which 2,071 were seriously injured and 63 killed.

12. In 2000, in Tomorrow's roads: safer for everyone, we introduced new casualty reduction targets for Great Britain to reduce casualties by 2010, compared with the average for 1994-98:-

- reduce by 40% the total number of people killed and seriously injured;
- reduce by 50% the numbers of children aged 0-15 killed and seriously injured;
- reduce by 10% the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres.

13. We subsequently added another target:

Tackling the significantly higher incidence of road accident casualties in disadvantaged communities in England. This was met in 2005, the target date.

14. By 2005, the number of children killed or seriously injured was 49% below the 1994-98 baseline. So we are on track to meet the 2010 target. But we must make sure that we remain on track and preferably do better than that. We also need to look below the target for all children killed or seriously injured to see if there are groups which need more attention.

15. In 2002, we published Child Road Safety: Achieving the 2010 Target which reviewed progress so far, considered developments and brought up to date the actions necessary to achieve the children's target. Since then, many of the actions have been completed or are well under way, while new priorities are arising. This new strategy looks forward to 2010, with new proposals for the future, building on what we have already achieved.

Who delivers the strategy?

16. Many organisations are involved in the work to reduce the number of child road casualties. These need to work together to make sure that we achieve as much as we can. They are:-

- The Department for Transport, including its executive agencies
- Other Government Departments, including the Department for Education and Skills, the Department of Health, the Department for Communities and Local Government and the Home Office.
- The Scottish Executive
- The Welsh Assembly Government
- Local Authorities, including Road Safety Officers and highways engineers
- Schools and teachers
- Police Services
- Fire and Rescue Services
- Primary Care Trusts and Community Groups
- Voluntary road safety organisations - national and local
- Other local community bodies, including youth groups and faith groups
- Commercial bodies, including vehicle and equipment manufacturers and retailers and insurance providers
- Parents and guardians
- Children themselves

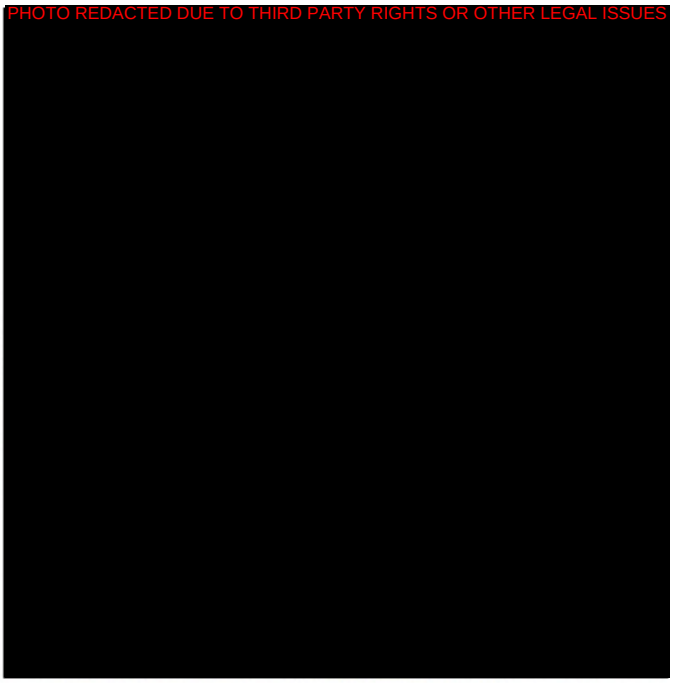
17. **The Department for Transport** has overall policy responsibility for road safety and for delivering the targets to reduce road accident casualties. Many aspects of road safety are devolved to the **Scottish Executive** and the **Welsh Assembly** Government, with DfT being responsible for England. However, for some aspects of road safety DfT is responsible for the whole of Great Britain, including most legislation. In some areas, such as driver and vehicle licensing, DfT is responsible for the whole of the United Kingdom, including Northern Ireland.

18. In Scotland and Wales, the Scottish Executive and the Welsh Assembly Government share with the UK Government responsibility for promoting road safety through education and advice and can give grants to local authorities and other bodies for measures to promote road safety. The Executive and Assembly Government has devolved responsibility for road humps and traffic calming and school crossing patrols and, as traffic authority for trunk roads, can set local speed limits, install pedestrian crossings and other engineering measures to ensure the safety of road users. In addition, the Executive and Assembly Government have certain other powers relating to speed limits and the authorisation of non-prescribed traffic signs. Police enforcement in Scotland and the Scottish Court system are also devolved.

19. The main part of this strategy covers the areas for which DfT is responsible. Section 7 summarises the position in Scotland and Wales.

20. DfT sets the policy framework for road safety in England. This includes making legislation (much of which covers the whole of Great Britain or the United Kingdom), undertaking research, conducting Think! publicity campaigns and providing advice, guidance and funding to people delivering road safety on the ground. We also provide some funding for road safety schemes at national level. The **Driving Standards**

Agency (DSA) is the regulatory authority for driver and rider testing throughout Great Britain and provides advice and training resources to people learning to drive and ride. The **Highways Agency (HA)** is responsible for operating the trunk road network in England, including most motorways and many other major roads. It actively promotes road safety, through the engineering, design and maintenance of the network and information and publicity.



21. **Local authorities** are responsible for all other roads. They have a statutory duty to promote road safety in their local areas and most have Road Safety Officers (RSOs) to carry out that duty. They therefore have a leading role in casualty reduction. This includes the design and maintenance of local roads; local publicity campaigns; supporting schools and others who deliver road safety education, training and publicity; working with other local organisations such as the police, fire and rescue service, health authorities and voluntary bodies. English local authorities set local targets and report on casualty reduction in their areas through the Local Transport Plan (LTP) process and its equivalent in London, best value performance indicators and local Public Service Agreements (LPSAs).

22. Other parts of local authorities can also play a part in delivering road safety, such as education and youth services, regeneration and economic development. This includes those working on initiatives such as sure start, mentioned below. Building road safety into wider local policies and greater joint working between different local authority departments can improve delivery of a wider range of policy objectives.

23. **Schools** provide road safety education, often taught in PSHE (Personal, Social and Health Education), but also included in other curriculum subjects. Also, schools are involved in developing travel plans for their pupils and all should have a School Travel Plan by 2010, which provides an opportunity to improve road safety, as part of plans to increase walking, cycling and bus travel to school.

24. **The Police** are responsible for enforcing the laws that improve road safety. They are also responsible for recording and reporting all injury road accidents and are very much in the front line. So they have an interest in promoting road safety before laws are broken or accidents happen. This includes promotional activity, working with RSOs, in schools and elsewhere. In many parts of Scotland, the Road Safety Unit sits in the police force rather than the local authority, so in those areas the police also have a role in road safety education and training initiatives.

25. **The Fire and Rescue Service** recognises that, working in partnership with other agencies, it can contribute to reducing the numbers of children and young people killed or seriously injured on the roads. The Service is often on the front line when accidents occur and is increasingly undertaking road safety education, particularly given that its community safety work targets those vulnerable groups who are also at high risk of injury on the roads.

26. **Voluntary bodies** actively promote road safety, working with DfT, local authorities and others. At a national level, these include organisations such as RoSPA, Brake and the Child Accident Prevention Trust (CAPT), who produce information and publicity and hold promotional events. There are also various other voluntary groups and faith organisations active at local level or in more specific sectors. These national and local groups are the main recipients of funding through DfT's Road Safety Challenge Grant Scheme.

27. There are also a number of **commercial organisations** that provide road safety materials to parents, schools and others and provide or support road safety publicity campaigns. Vehicle and equipment manufacturers and retailers can also contribute to child safety through the design and marketing of primary and secondary safety features. These can include in-vehicle systems that reduce the risk of an accident, such as better braking or tyres, as well as measures to reduce the severity of injuries for both pedestrians and car occupants. Insurance companies can also help to improve road safety, for example through providing discounts to drivers who undertake additional training.

28. DfT also provides grants to help promote cycle safety including a grant to the CTC to fund capacity building for the new national standard cycle training. DfT has also provided funds to the transport charity Sustrans, to help build new links to schools. These routes, which are largely off road, are aimed at enabling more children to walk and cycle to school more safely. Much of the funding for promoting cycling such as cycle training and links to school is now delivered through Cycling England. In June 2006, Cycling England's budget was doubled to Â£10m per year to 2008/09, with the additional funding being focussed on cycle training for children and additional safe links to school from the National Cycle Network.

29. Other central Government Departments also have a role in promoting child road safety. The **Department for Education and Skills (DfES)** has overall responsibility for schools and education, including road safety education and, with DfT, school travel. The **Department of Health (DH)** has policy responsibility for children's health and so has an interest in preventing road accidents, which are a leading cause of death and injury amongst children. The **Department for Communities and Local Government (DCLG)** leads on local government, regeneration and neighbourhood renewal, as well as the fire and rescue service, while The **Home Office** has lead responsibility for the police and law enforcement.

30. There are several cross-Government initiatives to improve the lives of children, as well as the child road safety strategy. These are:-

- Every Child Matters;
- Healthy Schools Programme;
- Travelling to School project;
- National Service Frameworks;
- Sure Start.

31. **Every Child Matters** is a programme of change for children and young people, establishing the Children's Service to provide children's care. Its aims include improving children's health and safety and it provides opportunities for working with a range of organisations.

32. The **Healthy Schools** programme aims to improve children's health in schools. To achieve Healthy School status, a school must meet set criteria including Personal, Social and Health Education (PSHE). Specific road safety and safe travel examples at key stages 1, 2 and 3 are available for schools to use when teaching PHSE. Also, the Physical Activity criterion specifies encouraging pupils, parents and staff to walk or cycle to school safely using the School Travel Plan. Every local education authority already has a local Healthy Schools programme and all schools should be working for Healthy Schools status by 2009.

33. The **Travelling to School** project aims to reduce car use for journeys to school and enable more children to take regular exercise by encouraging all schools in England to develop and implement a **school travel plan** by 2010. Improving the safety of children on their journeys to and from school is an important element of these plans.

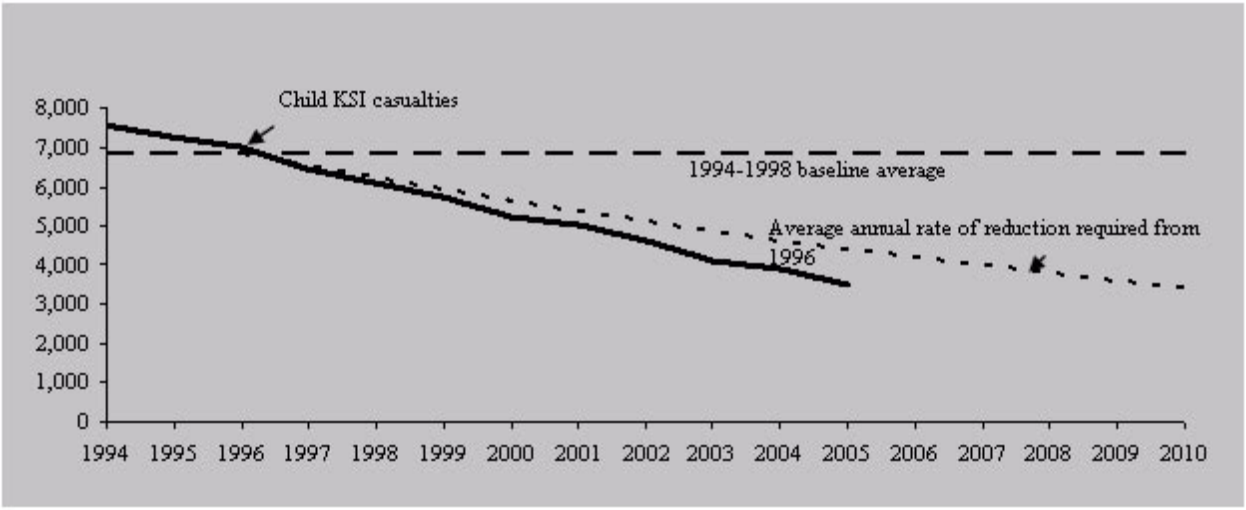
34. **Sure Start** programmes aim to enhance the life chances of children under four who are growing up in disadvantaged communities, and to improve their health and well-being. Under the Neighbourhood Road Safety Initiative (see below) new educational projects are being formed with Sure Starts in several local authorities. Examples include development of pedestrian skills training for parents with toddlers, basic road safety training for pre-school staff and developing new resources for parents.

3. Casualty data

Target

35. The number of children reported to be killed or seriously injured was 3,472 in 2005. This represents a reduction of 49% from the 1994-98 baseline figure of 6,860, well on the way to meeting the 50% target for 2010. TRL predictions to 2010 suggest the number of children who would be killed or seriously injured would fall by 60%.

Figure 1: Killed or seriously injured child casualties: 1994 - 2005



Trends

36. The number of children killed or seriously injured (KSI) has been falling since the early 1970s. In 2005 the number of child pedestrians killed or seriously injured was 49% below the 1994-98 baseline, child cyclists 53% below and car passengers 54% below.

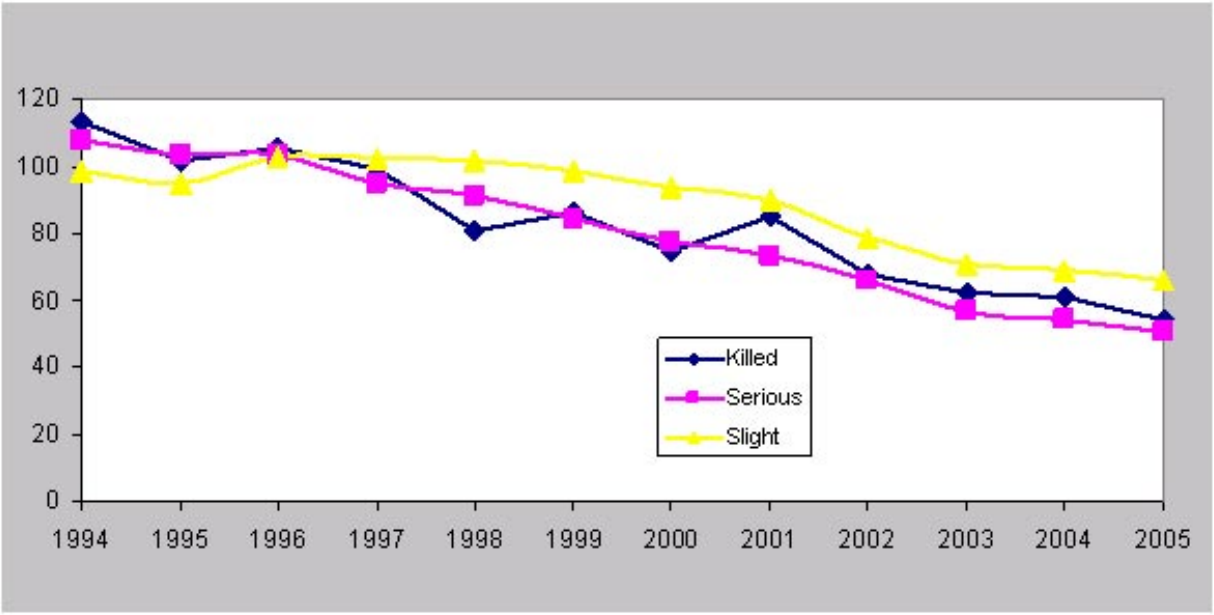
37. The number of children killed in road accidents dropped to 141 in 2005 which is 46% below the 1994-98 baseline. This compares with a reduction over the same period of 11% in all deaths from road accidents. The number of child pedestrians and pedal cyclists killed is 53% below the baseline and car passengers 35% below the baseline.

38. The casualty rate amongst children has dropped from 344 casualties per 100,000 children in 2000 to 251 in 2005. By 2005 the casualty rate had dropped to 34% of the 1994-98 baseline of 382 casualties per 100,000 children. The 2005 child casualty rate compared favourably with the all ages rate of 483 per 100,000 people. The child KSI casualty rate fell from 59 per 100,000 children in the 1994-98 baseline to 31 in 2005.

39. This decline in casualties has occurred in the face of increased travel by children. Over the last 10 years, the average distance travelled by a child has increased by about 15%, cycling has decreased (18%), with an increase in walking (5%), bus (7%), and car travel (16%). In 2005 around 80% of the average distance travelled by a child was by car, 10% by bus, 5% on foot and only 1% by pedal cycle.

40. Figure 2 below shows the trends in child casualty rates per billion passenger kilometres travelled. These reflect the changes in the number of casualties against changes in levels of travel. For all accident severities there has been a decline in the rate. The numbers of fatalities per billion passenger kilometres show a greater variation as the numbers are relatively small. By 2005 child casualty rates per billion passenger kilometres were 34% below the 1994-98 baseline.

Figure 2: Child casualty rates per billion passenger kilometres: GB 1994-2005: Index 1994-1998 average = 100



Age group

41. Whilst child casualties have been reducing for all age groups, the decline amongst the 11-15 year olds has been much less than that of younger children. This is mainly accounted for by lower drops in the number of pedestrian and cyclist casualties within this age group compared with younger children. 11-15 year olds also have a higher casualty rate, 248 per 100,000 population, almost twice the rate of 0-5 years olds at 121 per 100,000 population.

Figure 3: Child casualties by age group: 1994-2005

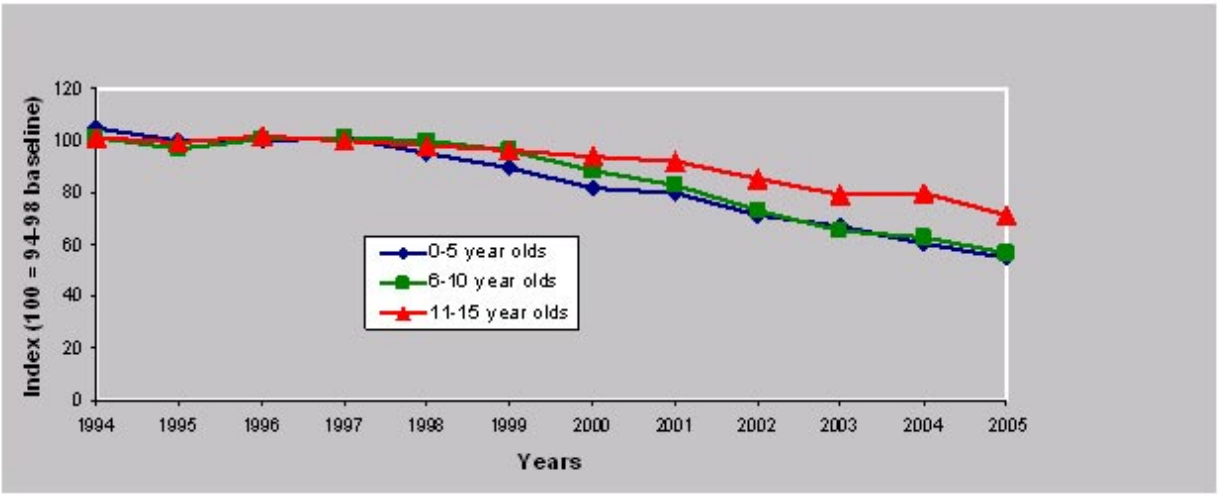


Table 1: Child casualties by age group: 1994-2005

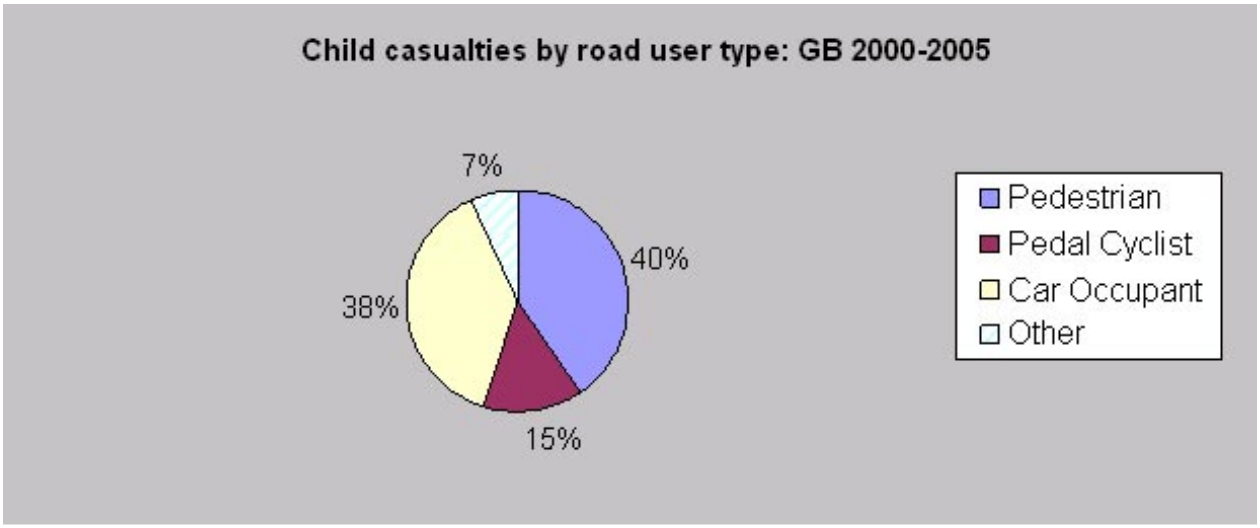
Table 1: Child casualties by age group: 1994-2005

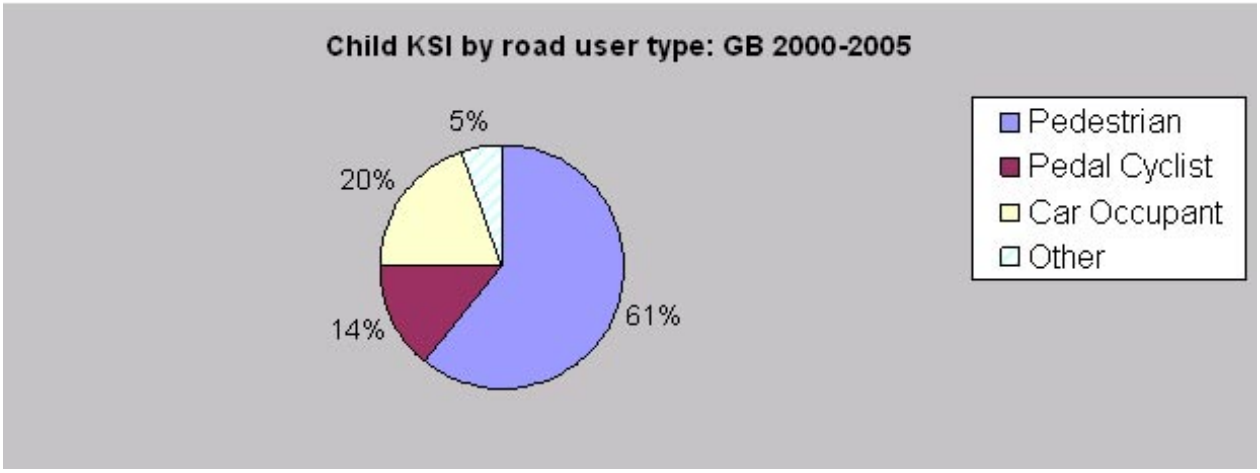
42. Over the last 5 years boys accounted for 58% of all child casualties and 65% of all children killed or seriously injured. In the same period boys accounted for 83% of all child cyclist casualties and 60% of all child pedestrian casualties. However girls account for just over half of all child car occupant casualties.

43. Figure 3 shows that pedestrians and car occupants comprise the two largest groups of child casualties, accounting for 40% and 38% of casualties respectively between 2000 and 2005. However pedestrians make up a far larger proportion (61%) of child KSI. In fact during this period, 20% of pedestrian casualties were killed or seriously injured, compared with 14% of cyclist casualties and 5% of other road user casualties.

Road users

Figure 4: Child casualties by road user type, all severities and KSI: 2000-2005



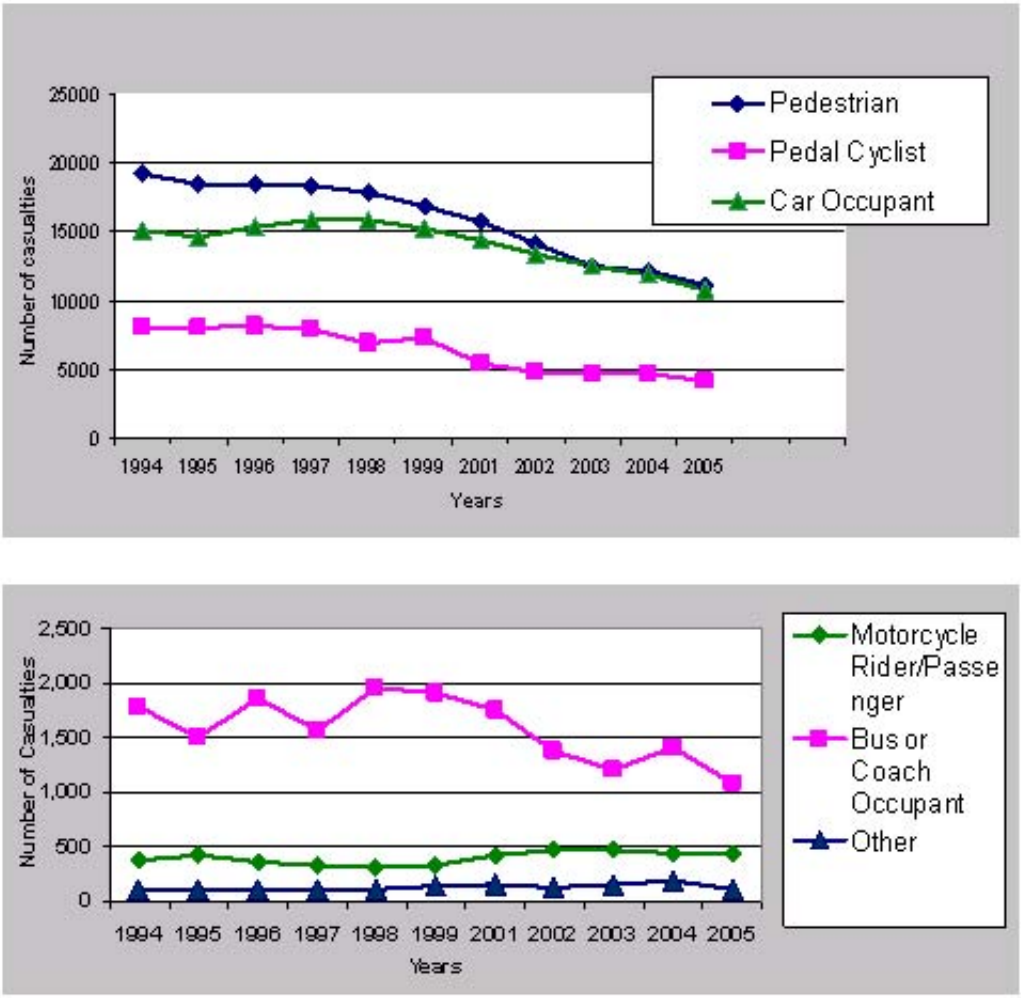


44. Bus passengers account for only 4% of all child casualties in 2005, but account for over a third of child casualties who were recorded as being injured on their way to or from school. 75 per cent of child bus casualties were seated at the time of the accident. Only nine per cent were boarding or alighting, with the remaining standing. However, passengers who were injured shortly after leaving a bus will be recorded as pedestrians. The number of bus user casualties has dropped 37% from the 1994-98 baseline, similar to car user casualties which have reduced 30%. However both have reduced at a lower rate than pedestrians and cyclists which have dropped 39% and 45% respectively.

45. Whilst only accounting for 2% of child casualties, the number of child (0-15) moped and motorcycle rider and passenger casualties is a concern as the numbers have increased by 21% since the baseline. The majority of these casualties were aged 13-15. In 2005 there were 432 casualties, of which 239 were riders rather than pillion passengers. Many of the child pillion passenger casualties were with riders who were themselves teenagers. The 1994-98 baseline figure is 357 casualties of which 166 were riders. In 2005 there were 142 child moped and motorcycle rider and passengers killed or seriously injured; of which 84 were riders rather than pillion passengers. The 1994-98 baseline figure is 103 killed or seriously injured of which 55 were riders. The minimum legal age for riding a moped is 16 and for a motorcycle 17 - so all

rider casualties up to age 15 are riding illegally. There is no minimum age for a pillion passenger.

Figure 5: Child casualties by road user type: 1994-2005



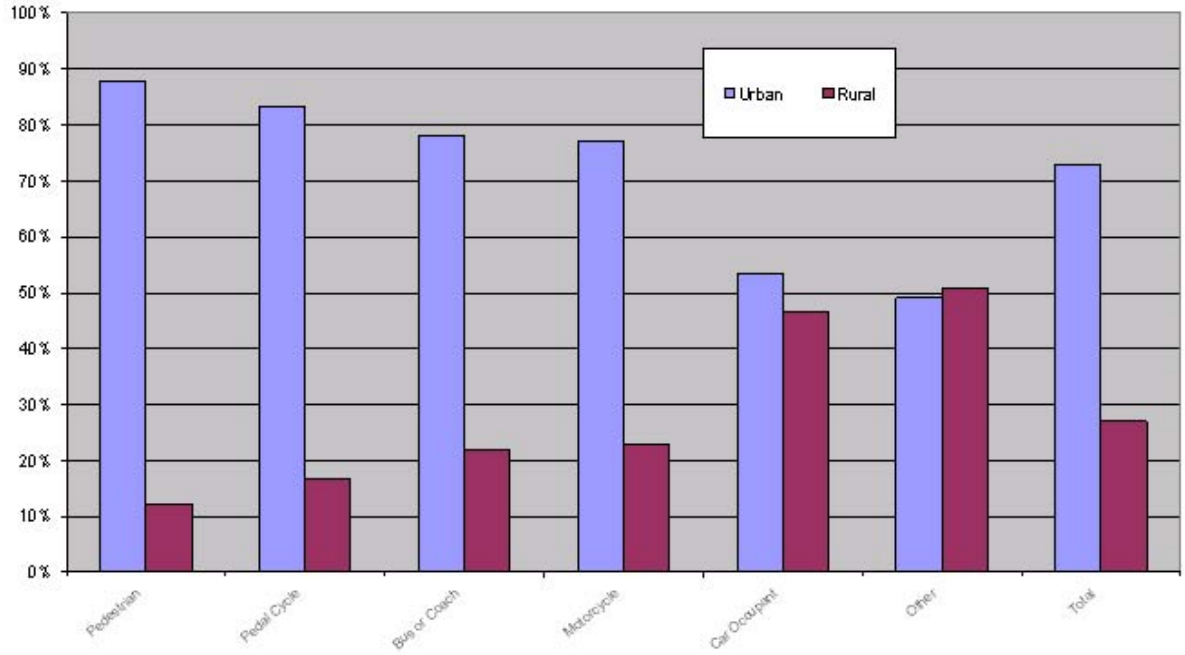
46. ln 2005 there were 51 children killed in cars of which 4 were drivers (all aged 14 or 15). Around half of children killed in cars were aged 11-15. In 2005 around 90% of child car passenger casualties aged 0-10 were injured in cars with drivers age 20-49. However for the older group (age11-15) this fell to 70% and 16% were with drivers who were themselves teenagers (age 16-19).

Table 2: Percentage of child car passenger casualties by age of driver and age of casualty: GB 2005

Percentage	Age of Passenger		
Age of Driver	0-5	6- 10	11-15
0 - 15	0	0	0
16 - 19	2	2	16
20 - 29	31	15	11
30 - 39	43	48	27
40 - 49	14	26	31
50 - 59	5	5	8
60 - 69	2	2	3
70 - 99	1	1	1
Age Unknown	2	2	3
Total	100	100	100

47. In 2005 nearly three quarters (73%) of child casualties occurred in urban areas. This rises to 88% for child pedestrians and 83% for pedal cyclists but only 53% of child car user casualties occur in urban areas. For children killed or seriously injured a similar proportion (74%) occurs in urban areas and the variation by road user type is broadly similar to that for all casualties. However the exception is car users where 71% of KSI casualties occur in rural areas.

Figure 6: Child casualties by Urban / Rural area, and road user type: GB 2005



Regional Trends

48. There are substantial regional variations between the casualty rates for children. In 2005 London had the lowest rate at 210 child casualties per 100,000 population, and the North West saw the highest at 344. Between 2000 and 2005, the South East has had a consistently low rate, having the third lowest casualty rate per population in 2005. The North West had the highest rate in every year. During this period London saw the greatest drop, with the child casualty rate falling from 314 casualties per 100,000 child population to 179 (43%) . The smallest drop was in the North East which saw a fall of only 3% from 333 to 290 per 100,000 child population (13%).

Figure 7: Child casualties per 100,000 population: by region and country: 2005

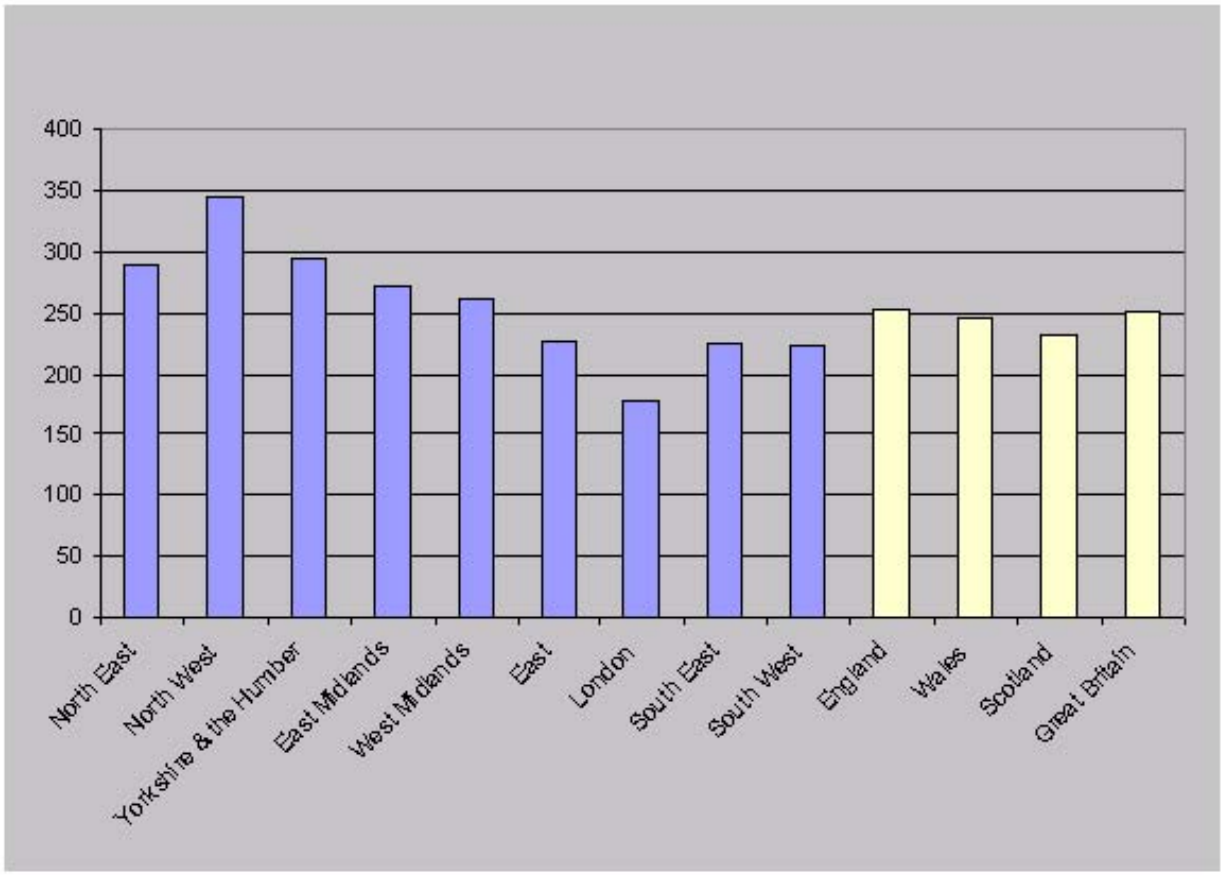
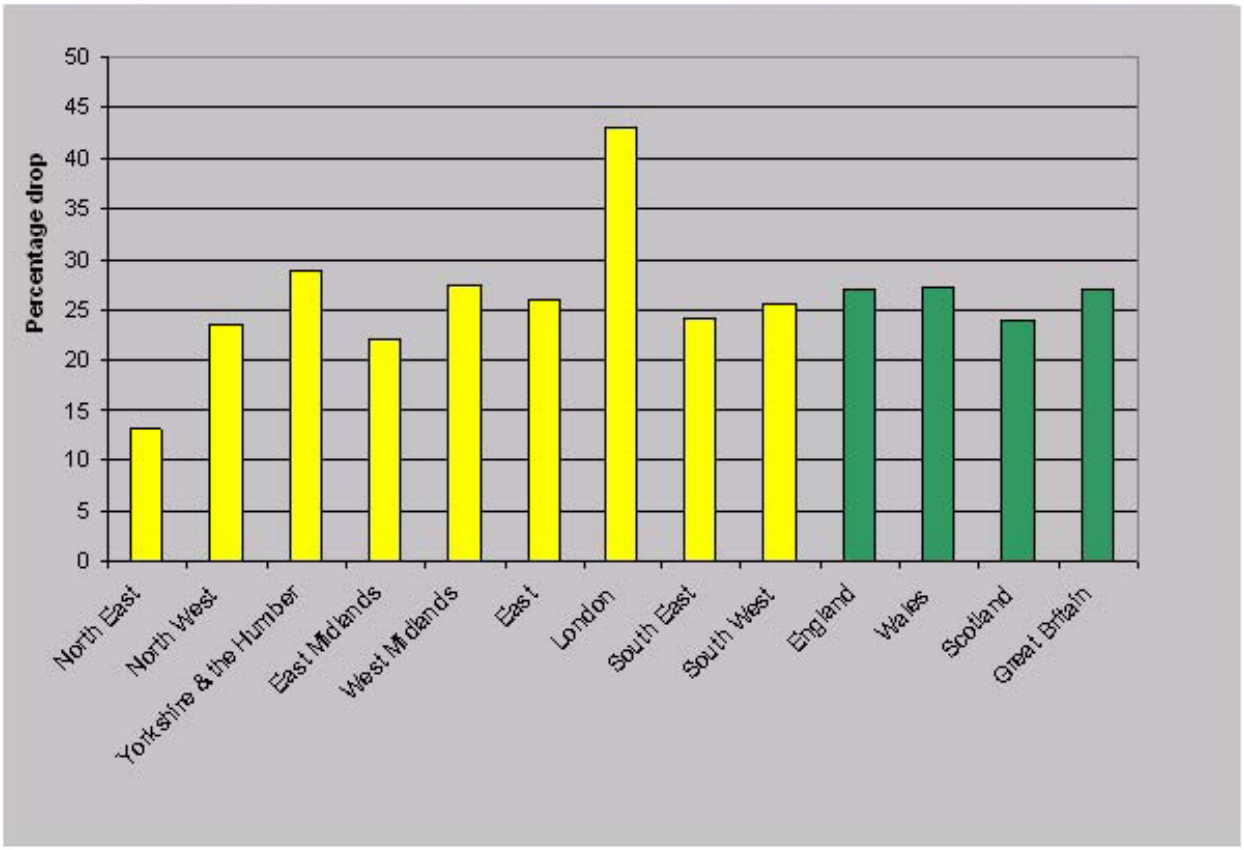


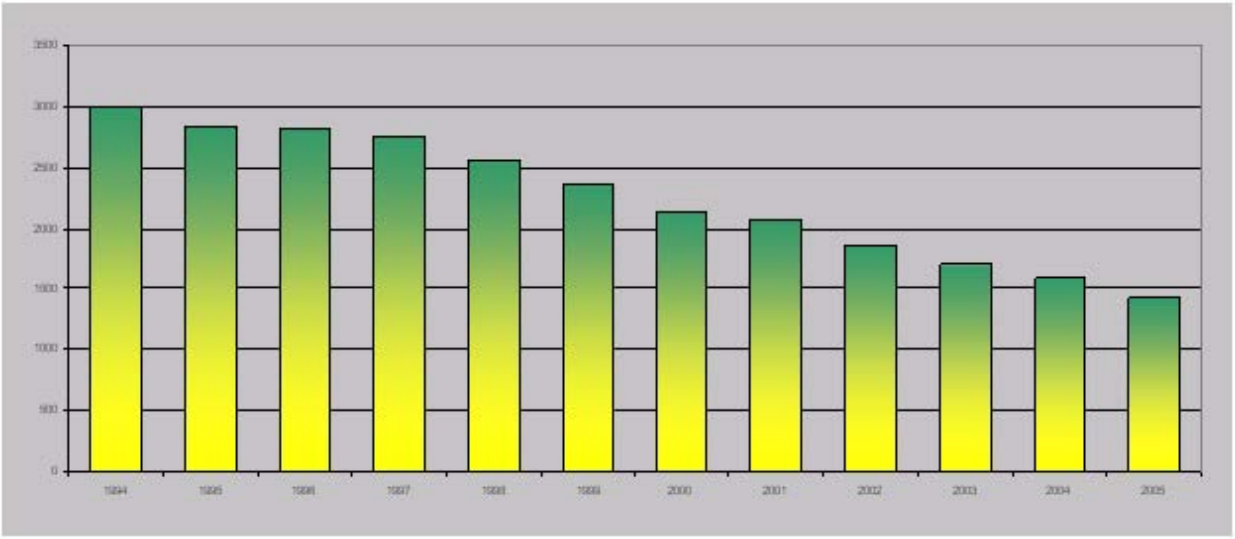
Figure 8: Percentage drop in child casualty rate per 100,000 population between 2000 and 2005: by Government Office Region



Deprived areas

49. The Department set a target to achieve a bigger percentage reduction in the number of road deaths and injuries for the 88 local councils that are eligible to receive Neighbourhood Renewal Funding (NRF) than for England as a whole by 2005, compared with the 1999 to 2001 average. In 2005 1,422 children killed or seriously injured were in NRF areas, making up 48% of all England's child KSIs. An estimated 40% of children aged 0-15 live in these areas. 2005 saw all child casualties in the NRF areas reduce by 32% from the 1999/2001 baseline, compared with 30% for England as a whole. Child KSIs in the NRF areas reduced by 33% average, compared with 34% for England as a whole.

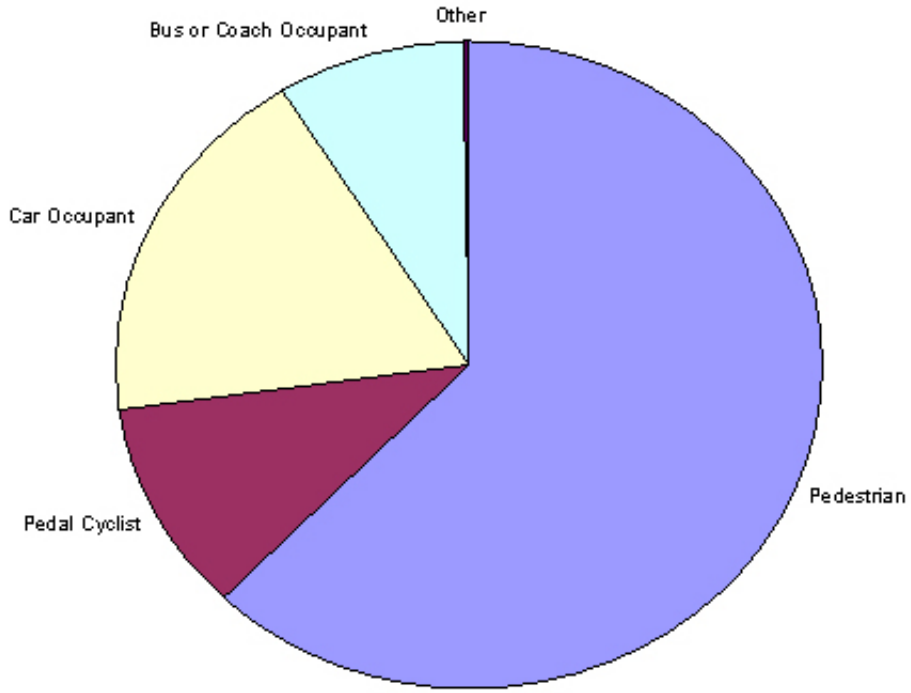
Figure 9: Child KSI casualties in NRF 88 areas: 1994-2005



School journeys and bus passenger casualties

50. In 2005, 16% of all child casualties were recorded as occurring on the school journey. This includes casualties on any part of the whole of the journey to or from school, many of which occur away from the school itself. During peak hours of 7-10 am and 3-6 pm on weekdays the proportion of child KSIs who were on school journeys rises to 23 % (all severities 22%). 62% of child casualties (of all severities) who were on their way to or from school were pedestrians and 18% were car users. However for children killed or seriously injured, 82% were pedestrians and only 6% were car users. 21% of child pedestrians killed or seriously injured were recorded as on a journey to school (25% of all severities) and 50% of child bus or coach users (36% of all severities) are recorded as the same.

Figure 10: Child casualties all severities recorded as on way to or from school by road user type: 2005



Crossing the road

51. 80% of child pedestrian KSIs occurred away from pedestrian crossing facilities in 2005, compared with 67% of adults. 28% of these child casualties were masked from the driver's view by a parked or stationary vehicle, 33% were crossing from the driver's nearside and 18% from the driver's offside.

4. Research and evaluation evidence

52. Research and other evidence stresses the importance of a holistic approach to road safety and suggests that success in improving safety for children and teenagers is most likely to be achieved through combining measures to address the behaviour of all road users, improving the road environment and designing vehicles that better protect both their occupants and those at risk outside the vehicle.

Analyses of high casualty rates in the UK

53. Christie *et al*. (2004a) present a range of analyses of child road traffic casualties to improve understanding of the relative safety of children in the UK. They report that, using population-based casualty rates for 1996-2000, the UK appears to perform well and is third overall out of 26 countries. However, this rating is strongly influenced by the very good performance of the UK in the area of children as vehicle occupants where the UK is third behind Japan and Switzerland, and disguises the poor performance for pedestrians where the ranking is seventeenth.

54. Christie *et al*. (2004a) also derived exposure based fatality rates, in terms of fatalities per kilometre travelled, although these could only be calculated for 10-14 year olds in nine countries (Germany, Hungary, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the UK and the USA). Out of the countries for which data are available:

- For 10-14 year old pedestrians, the UK comes seventh out of eight, with only the USA having a worse rate
- For 10-14 year old cyclists, the UK also comes seventh out of eight, with only Hungary having a worse rate
- For 10-14 year old car occupants, the UK comes fourth out of nine, behind Switzerland, Norway and the Netherlands

55. In other words, exposure-based fatality rates do not seem to change the picture presented by population-based rates as much as might have been expected.

56. Exposure based rates are also important in helping to assess whether the downward trend in population-based fatality rates is a result of fewer children walking or cycling. Christie *et al*. (2004a) report that for UK child pedestrians and child cyclists, the number of fatalities per unit of exposure has decreased, suggesting that walking and cycling have both become safer. For child car occupants in the UK, the number of fatalities per unit of exposure has also decreased, suggesting that car occupancy has also become safer.

57. *Road Casualties Great Britain 2005* indicates that in 2004 the UK still had one of the worst child (0-14) pedestrian fatality rates amongst European countries, with a rate twice that of the best performing countries, including France, Italy, the Netherlands, Sweden, Denmark and Norway. However, there is some evidence that the relative position of the UK is improving. For example, the UK had a lower child pedestrian fatality rate than Belgium in 2003, whereas this was not the case between 1996-2000 (Christie, *et al*. 2004a).

58. A number of studies have sought to understand more about why the UK's child pedestrian casualty rate remains poor compared to many other European countries. For example, Bly *et al*. (1999) undertook a comparative study of child pedestrian accidents in Great Britain, France and the Netherlands. Their study combined analysis of accident data, surveys and interviews, as well as detailed on-site assessment of a random selection of walking trips, in order to quantify the distributions of time spent by children near to roads, the number of times they cross the roads, and the numbers of child pedestrian accidents.

59. The study indicated there is very little difference in the total amount of time children spend near roads in the three countries. However, the study found that different distributions of this exposure across different road environments account for perhaps half of the overall difference in casualty rates between the three countries. In particular, children in Britain spend more time near, and undertake more road crossing activity in more major roads, wider roads, roads with higher flows of traffic, and roads with higher traffic speeds, than children in France and the Netherlands. The study indicates that this is largely the result of different land-use and activity patterns in Britain, and their relation to the road hierarchy. This leaves half of the difference in child pedestrian accidents between the UK, France and the Netherlands which is unaccounted for by these factors.

60. A number of studies provide evidence to show that children in the most deprived neighbourhoods are at greatest risk. For example, the report *Streets ahead*, produced in 2002 by the Institute of Public Policy Research (Grayling *et al*., 2002), found that children in the ten percent most deprived wards in England were more than three times as likely to be pedestrian casualties as children in the ten percent least deprived wards. The problem is compounded because more people live in deprived wards and children are a larger proportion of the total. More than a quarter of child pedestrian injuries in England in 1999 and 2000 occurred in the ten percent most deprived wards, and almost half occurred in the 20 percent most deprived wards. This is the case for both deaths and serious injuries and for minor injuries.

61. Graham *et al*. (2005) also report an association between increased deprivation and higher numbers of pedestrian casualties across England. They find the deprivation effect is strong both for all child casualties and for children killed or seriously injured. Estimates for adult casualties also reveal a positive and significant association with increasing deprivation, but the magnitude of the effect is smaller than for children.

62. The most recent data available continue to show significantly higher child road casualties among disadvantaged groups and in disadvantaged areas. Edwards *et al*. (2006) state that in 2001-2003, compared with children of parents in NS-SEC Class 1, the death rate of children with parents in NS-SEC Class 8 was 20.6 times higher for deaths as pedestrians, 5.5 times higher for deaths as car occupants, and 27.5 times higher for deaths as cyclists. National Statistics Socio-economic Classification (NS-SEC) Class 1 represents higher managerial and professional occupations and Class 8 those who have never worked and the long-term unemployed.

Road safety education, training and publicity

63. A four year evaluation of the Kerbcraft child pedestrian training national pilot (see below) has been conducted, jointly funded by the Department for Transport and the Scottish Executive. The results confirm and reinforce the positive behavioural impact of practical roadside training for children as young as 5 years old (Whelan and Towner, 2006). For example, children trained following the Kerbcraft approach show consistent and significant improvements in finding safe places to cross. Trained children show safer road crossing behaviour from between parked cars, and are significantly better at avoiding obstructions at junctions, i.e., they move away to a safer place.

64. As the study sample was drawn from 28 schools in deprived areas across England with varying social backgrounds and road environments, the results also confirm the robust nature of the Kerbcraft model, even when being delivered in a wide variety of different circumstances. Since children who received three training sessions or less showed significantly poorer performance on some skills, the results reinforce DfT’s recommendation that children receive at least four training sessions for each Kerbcraft skill to maximise the improvements in behaviour at the roadside.

65. The European Commission project ROSE 25 documented and assessed good practice in road safety education (RSE) targeted at young people in all EU member states. The final report (European Commission, 2005a) found that responsibility for road safety education, training and publicity seldom lies clearly in the hands of one body, and that several institutions and organisations are usually involved, both at national and local level.

66. The study reported that RSE often lacks coordination between institutions, and that lack of or insufficient coordination results in serious losses in efficiency. The final report stresses the importance of effective two-way communication between national RSE agencies and other stakeholders at regional and local levels. At local level, the study found that effective coordination between schools, police and local authorities is a key success factor in RSE delivery. In relation to schools, the study recommended nomination of a RSE contact teacher within each school to coordinate RSE and actively assist local coordination. Research and information on new resources could also be channelled through a network of such teachers.

67. Christie *et al*. (2004a) note that the UK is unusual in not having compulsory road safety education in schools. They state that making school travel and safety a more formal part of the educational process could be much more powerful than relying on voluntary uptake, which is known to be difficult to encourage, especially among socially disadvantaged groups. The ROSE 25 report (European Commission, 2005a) recommends a minimum of 10 hours of RSE in school per year, noting that this would allow the implementation of two substantial RSE packages per year. The study recommends RSE should be based on core elements, which are packages or programmes providing transfer of life skills for pedestrians, cyclists, moped users and pre-drivers.

68. The ROSE 25 report notes that RSE is often insufficiently covered by evaluation and quality control. The final report recommends that evaluation should be part of RSE interventions from the very start, and that funding for evaluation should be an integral part of RSE interventions.

69. In relation to child pedestrian safety, the ROSE 25 report states that practical skills training in a realistic setting is a key ingredient for success. The study recommends that parents should be actively involved in RSE at school, and highlights several approaches which strive for a partnership between schools and parents in terms of child pedestrian safety.

70. This broad approach is also reflected in the recommendations of other studies. Christie *et al*. (2004a) highlight a number of approaches to safety, which are shared by top performing countries, such as teaching pedestrian skills at the roadside, in playgrounds or traffic parks, and providing materials and advice for parents. Christie *et al*. also note participant approaches which are being utilised in some top performing countries, where children are consulted about traffic safety or are encouraged to research and learn about traffic themselves. For example, in Norway some schools allow children to go out and count the number of cyclists wearing a helmet and car occupants using seat belts.

71. The OECD (2004) report, *Keeping children safe in traffic*, identifies the following examples of best practice in relation to road safety education, training and publicity:

- Road safety education that is part of the national education curriculum at all levels from pre-school on, with regular high-quality inputs to develop children’s skills, risk awareness, attitudes and knowledge
- Drivers are made aware of their responsibilities to their passengers and other road users, and they understand the limitations of children’s behaviour in traffic. These outcomes can be achieved by effective education, training and publicity.
- Publicity is used in conjunction with other measures as a powerful tool for delivering information and influencing attitudes and behaviour in all areas of road safety, from environmental improvements to changes in legislation to vehicle modifications. It is being used to engage all sectors from policy

makers, professionals and businesses to communities and consumers
- Publicity campaigns targeting drivers that encourage drivers to behave more safely by raising awareness of how children behave, alerting drivers to their responsibilities to protect car occupants and child pedestrians and cyclists, and highlighting such issues as choice of speed
- Publicity to maintain drivers' awareness of the importance of correct fitting and use of child restraints and seat belts in cars.

72. What is evident here is the importance of targeting and changing drivers' attitudes in order to achieve road safety improvements for children and teenagers. The OECD report emphasises that the focus of responsibility for child road safety needs to be shifted more towards drivers.

Safer infrastructure

73. The OECD (2004) report, *Keeping children safe in traffic*, states that helping children and other road users to adapt their behaviour in order to interact safely with traffic in the road environment is only part of what is needed to keep children safe. Traffic engineers, urban designers and planners have a duty to design systems that take account of children's mobility needs, travel behaviour and differences in perceptual and reactive capabilities in order to maximise their safety and mobility.

74. Christie *et al*. (2004a) state that in relation to children as pedestrians, the top performing countries are Sweden, the Netherlands, Finland, Germany and Denmark. In contrast to other countries, the majority of these countries:

- Have speed reduction measures (including environmental modification and low speed limits) and signalised crossings in most local authorities or municipalities
- Have these measures outside many schools
- Have outside play areas, such as parks or playgrounds, in most residential areas

75. The SUNflower+6 extended study (European Commission, 2005b) reviewed the development of road safety in Sweden, the United Kingdom and the Netherlands. The final report highlights the need for major initiatives to modify urban road layouts, noting that vulnerable road user casualty rates are unlikely to fall substantially without these, unless exposure is reduced through less activity.

76. The OECD (2004) report identifies the following examples of best practice which distinguish the top-performing countries from those that did less well in terms of children's road safety:

- Traffic calming which reduces vehicle speeds is advocated as a key measure to improve the overall safety of road users, in particular children. Top-performing countries used area wide traffic calming to a greater extent and had a wider range of infrastructure safety measures
- Children's safe mobility facilitated by the design of residential areas that incorporates traffic calming techniques and low speed zones such as 'home zones' to favour walking and cycling as the dominant modes
- Making speed reduction a key objective in order to protect vulnerable road users
- Setting speed limits according to the function of roads within a hierarchy.
- Lower speeds on small rural roads and availability of foot and bicycle paths are important
- Outside residential areas where low speed limits are less feasible and roads are wider with heavier traffic flows, attention is given to designing safe places to cross the road. Safety should be

encouraged by use of zebra crossings and signalised intersections, pedestrian islands, and school crossing patrols where necessary. For very busy roads, segregation from motorised traffic and provision of well-lit foot bridges and tunnels may be necessary
- In the development of new educational facilities, consideration given to safe access using all travel modes, especially cycling, walking and use of public transport
- Better maintenance of the road environment and in particular play spaces and safe access to such spaces - as failure to repair damage or clear away obstructions often contributes to further deterioration.

77. Bly *et al*. (1999) highlighted that the use of special measures to slow traffic including formal traffic calming is very prevalent in the Netherlands, and noted that the special measures in place are associated with substantially lower levels of risk than in either Britain or France. The SUNflower+6 extended study (European Commission, 2005b) indicates that the Netherlands has been particularly successful over the last two decades in improving the safety of vulnerable road users through physical treatment of 60 km/h roads and the extensive introduction of 30 km/h zones. The report specifically recommends that Britain should:

- Encourage increased use of 20mph zones in areas having high pedestrian accident rates
- Focus more effort on seeking innovative road designs which cater for mixed vehicular and vulnerable road user activities at the higher traffic flow levels evident in Britain
- Improve facilities for cycling, especially in the context of the Government's desire to increase cycling

78. These recommendations are consistent with the findings from IPPR's Street ahead study (Grayling *et al*., 2002). The principal recommendation from the study is that traffic calmed 20 mph zones should become the norm in residential areas, and that deprived areas with high casualty rates should be prioritised.

79. There is robust UK evaluation evidence in relation to these key measures. For example, in a comprehensive study, Webster and Mackie (1996) reviewed the effectiveness of traffic calming in 20mph zones. Across 72 such zones, they found that the number of accidents reduced by about 60 per cent on average and vehicle speeds by over 9 mph. Child pedestrian accidents were reduced by an average of 70 percent.

80. Where infrastructure improvements are possible in relation to children's road safety this will benefit all road users, since what constitutes a safe road environment for children will usually be safer for the general public, and in particular older road users (OECD, 2004).

81. The research appears to show that what is required in terms of physical infrastructure is relatively well understood. However, a more widespread approach to modifying the environment is required in the UK to improve the safety of children as pedestrians or cyclists, and barriers to implementation need to be overcome (Christie *et al*., 2004a).

82. The Local Transport Plan (LTP) process is now the primary means through which local authorities plan and implement safer infrastructure, and this is being evaluated on behalf of DfT by a consortium led by Atkins Transport Planning, also including the Local Government Centre at Warwick Business School and PricewaterhouseCoopers.

83. Overall, the final report from the first stage of this long term evaluation (Atkins Transport Planning, 2003) finds that the introduction of LTPs has been strongly supported by local authorities in England as a major step forward from the previous Transport Policies and Programme (TPP) process. However, whilst authorities are making good progress in delivering their LTP programmes, there is increasing realism over the challenges of delivery relative to high expectations when LTPs were first introduced. Many authorities are experiencing substantial underspends in some of their LTP budgets and lack of delivery is a major concern. Staff shortages and lack of revenue funding are seen as the most pressing barriers, with staff and skills shortages seen as a major barrier to LTP development and delivery by almost all authorities.

84. Specifically in relation to road safety, more recent findings (Atkins Transport Planning, 2006) indicate that virtually all LTPs include the national road safety target, but very few authorities have adapted the target to reflect local circumstances. The evaluation reports that in 2004/05, 50 out of 85 authorities were on track to meet their KSI targets, and 65 authorities were on track to meet their child KSI targets.

85. The evaluation has also found that Road Safety and Traffic Management were the main areas of expenditure during LTP1. However, authorities are now spending a smaller proportion of LTP capital on safety schemes. Expenditure on safety schemes increased by 27 percent between 2001/02 and 2004/05, compared to an overall increase in expenditure of 63 percent.

86. There is also some external research on the LTP process. For example, Grayling *et al*. (2002) reviewed the Local Transport Plans of all 85 top-tier county and unitary district councils in England outside London, in order to understand their road casualty reduction, traffic calming and speed management policies. They also sent out a survey to all 171 unitary and county councils in England and Wales to determine the location of all planned and implemented 20mph zones, since these measures are particularly effective in reducing child pedestrian casualties. Eight out of ten local authorities that responded had implemented traffic-calmed 20mph zones, an average of seven each for those with zones. Most planned to introduce further zones. Of the authorities without 20mph zones implemented, 14 planned to introduce them and ten had no plans to do so. Accident record and local demand were the most important factors determining the location of zones. Proximity to schools was also a common feature.

Enforcement

87. Christie *et al*. (2004a) state that clearer guidelines are needed for implementing low speed limits near schools and in identifying these areas as enforcement zones.

88. The SUNflower+6 extended study report (European Commission, 2005b) recommends that the latest UK policy statements on enforcement promising greater visible presence are accompanied by sufficient resources to achieve this. The report recommends that senior police managers demonstrate a genuine commitment to road safety by maintaining an appropriate level of traffic policing. The study specifically recommends that the UK increases the real level of detection of drink drive offences to the perceived level. In relation to speeding offences, the report suggests that the balance between enforcement and public awareness might be improved. Although these recommendations are not specific to the road safety of children and teenagers, these issues need to be addressed in order to secure benefits for these groups.

In-car safety and vehicle standards

89. OECD (2004) states that the most important measure to protect child occupants of vehicles is the provision and use of suitable child safety restraint systems. Best practice includes:

- Compulsory seat belt use and high levels of compliance in both front and rear seats. Although seat belt use is clearly compulsory in the UK, actual wearing rates vary.
- Correct use of child restraints. Child restraints may be inappropriate for the age of the child, badly fitted, or incorrectly used

90. Christie et al. (2004a) state that in relation to children as vehicle occupants, the United Kingdom is one of the top performers, as well as Switzerland, the Netherlands, Sweden and Norway. In contrast to other countries, the majority of these countries:

- Achieve high seat-belt wearing rates (around 90 percent or higher) in the front or rear of private vehicles
- Have identified the high-risk groups
- Have compulsory seat-belt wearing on school buses

91. The evidence suggests that combined interventions are effective in improving child passenger restraint use. The recommended interventions include community-wide information and enforcement campaigns, built around the active participation of public safety officials and safety-oriented voluntary organisations (OECD, 2004).

92. In relation to vehicle design, best practices and possible improvements include:

- " Vehicle design incorporating passive safety systems such as crumple zones, airbags and safety door and window locks
- " Where airbags are fitted, care is taken with the child’s seating position as front seat airbags can present a risk to children. In both Europe and North America, parents are advised that infants and young children should not use the front passenger seat, especially if an airbag is fitted
- " More attention should be given to improving the safety of pedestrians and cyclists by designing vehicles that reduce impact in the event of a crash. Such measures, particularly the redesign of car fronts, have significant potential to reduce deaths and injuries to children (OECD, 2004).

Key research findings

93. It is reasonably clear from existing research **what works** in relation to many aspects of road safety education, infrastructure improvement and enforcement. A key question and therefore a principal focus of future research and evaluation should be **delivery** and how to support this, and understanding and finding ways to overcome the barriers.

94. Research and other evidence demonstrates that road safety policy and delivery needs to be holistic, combining measures to improve road safety education and training, providing safer infrastructure, enforcement, and improving in-car safety and vehicle design. The OECD (2004) report, *Keeping children safe in traffic*, provides a comprehensive account of the policies and practice required to continue to improve the road safety of children and teenagers. Key recommendations include:

- Road safety policy should include specific strategies for improving child safety including specific targets for casualty reduction and monitoring and reviewing the evidence base
- Road safety education and training is a lifelong learning process that neither begins nor ends in schools. All road users have a duty to keep children safe, and parents have a vital role to play through teaching and example in the early years
- Driver training is an integral part of the safety education system, and while children need to know how to behave safely on the roads, drivers need to take more care and responsibility and to recognise that children will not behave in the same way as adults
- Road safety education should use approaches based on sound educational practice with an emphasis on problem-solving and practical skills training. It needs to be an ongoing programme not a one-off activity
- Publicity needs to address all road users and age groups using a targeted approach for individual audiences to raise awareness of how children will behave in traffic. Publicity should also be aimed at improving driver behaviour, especially in respect of inappropriate speed
- Traffic engineers and planners have a duty to take children's needs and abilities into account in designing the built environment
- More priority needs to be given to vulnerable modes through the use of traffic calming and facilities for walking and cycling
- All children should be provided with child restraints in vehicles that are suitable for their age and size, and properly fitted and used
- Vehicle design should incorporate safety features such as crumple zones, airbags and safety locks for doors and windows that take account of the needs of children. Parents need good advice on the correct use of child restraints and the safest seating positions particularly where airbags are fitted.
- Vehicle designers and legislators on vehicle standards should give more attention to protecting pedestrians and cyclists as well as vehicle occupants from injury and death

95. More than a quarter of child pedestrian injuries in England in 1999 and 2000 occurred in the ten percent most deprived wards, and almost half occurred in the 20 percent most deprived wards (Grayling et al., 2002). Since there may be resource and capacity issues constraining delivery of infrastructure improvements such as 20mph zones in all areas, the evidence suggests that more effective targeting of resources in disadvantaged areas would be effective in improving the overall road safety of children and teenagers.

96. The evidence also indicates that most road traffic accidents with child casualties occur on local roads, and so local authorities are principally responsible for the delivery of measures to improve safety. National road safety policy therefore needs to ensure effective support for local agencies, and greater emphasis on effective partnership working.

97. There is a strong argument for strengthening public and wider stakeholder participation in road safety policy development and implementation. The SUNflower+6 extended study report (European Commission, 2005b) highlights the importance of strong and accountable links between central governments and local authorities, and increasing public participation in policy definition in order to deliver efficient and effective safety measures that are seen as fair by the majority of road users. The OECD (2004) report also recommends that the whole community, including children, is consulted and involved in traffic planning and decision making, to ensure that the activities and travel needs of all are fully taken into account.

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5. Themes for the strategy

Education / training / lifelong learning

98. Education is the main way of getting road safety messages to children. A large part of this is through schools, where road safety is part of the Personal, Social and Health Education (PSHE) curriculum and can also be integrated into citizenship and a number of other mainstream subjects. Schools can also provide children with specific road safety training, for example the Kerbcraft pedestrian training scheme. Cycle training has also been identified as being an ideal activity for school after hours clubs. But road safety education is not limited to schools, or to children.

99. Parents also have a very important role in educating and setting a good example for their children, so we need to make sure parents are properly informed. This starts before children are at school and continues into early adulthood. Educational materials for use by parents with their children are available, but they also have an important influence through their own behaviour as pedestrians and drivers or riders.

100. We should make the most of opportunities to get road safety messages across to children and parents at regular points of contact such as doctors' or dentists' surgeries, or other contacts with health and social services, as well as through schools. Other organisations that are involved with children, such as youth clubs, sports clubs or other activities or community groups, can also play a part in educating children about road safety. There may be different issues in rural areas, both in terms of access to road safety information and also in the content of the messages, as there is a much higher proportion of car occupant casualties in rural areas.

101. Children are already thinking about becoming users of cars, mopeds and motorcycles long before they can legally do so, so we need to ensure that their education prepares them to become safe drivers and riders once they are old enough. Whilst our casualty reduction target for children covers those up to age 15, we should not forget about the importance of road safety for teenagers of 16 and above. Young drivers or riders of 17 or more often travel with younger passengers. Adult drivers and riders also need be made aware of child road safety as part of their own training.

Publicity

102. The Think! publicity campaign is a key element of the Department's efforts to improve road safety. With separate approaches for young children, teenagers and parents, teachers a large part of the campaign is aimed at improving child road safety. It includes everything from large scale advertising campaigns to dedicated online approaches such as the children's hedgehog road safety website, http://www.hedgehogs.gov.uk and resources for teachers, road safety officers and others. Local authorities and voluntary road safety bodies such as RoSPA, Brake and CAPT also carry out road safety publicity campaigns, as do some commercial organisations. We need to ensure that publicity is directed at the highest priority groups, in a way that gets across to them effectively.


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Road engineering, environment and planning

103. The physical road environment has a major effect in preventing accidents and making those that do happen less serious. Engineering measures have played a major role in casualty reduction, by making roads safer. We need to continue these efforts and focus on measures that make roads safer for children, by identifying and applying best practice in planning, design, implementation, evaluation, monitoring and auditing of engineering measures. DfT provides a wide range of guidance to local highway authorities on speed limits, traffic management and traffic calming aimed at improving the safety of vulnerable road users such as cyclists and pedestrians. Partnerships between different bodies such as local authorities, police and schools can also help to improve the road environment, for example by developing safer routes to school. Child road safety also needs to be taken into account when planning new facilities and the routes to them, such as the location of new schools, hospitals, leisure facilities or new roads.

Vehicle engineering and secondary safety features

104. Vehicles can be designed to include features that help to prevent accidents and to protect people involved when accidents do occur. The design of cars and other vehicles should aim to reduce the risk of an accident happening and to minimise injuries both to occupants of vehicles and to other road users including pedestrians and cyclists in the event of an accident. This includes improving vehicle equipment such as tyres and brakes to help prevent accidents, as well as new primary safety technologies such as Electronic Stability Control. Safety equipment such as seat belts and other child restraints, and cycle helmets, can also help to protect vehicle occupants and cyclists from injury. Measures to improve visibility, such as vehicle (including cycle) lighting and high visibility clothing for cyclists and pedestrians can also help to reduce the risk of accidents.

Legislation and enforcement

105. Legislation requires road users to behave in a way which improves road safety, for example through having to pass a driving test, wear seat belts or other child restraints, use lights at night and obey speed limits. Effective enforcement is needed to make legislation effective and the police have a leading role in enforcement. The Roads Policing Strategy was jointly agreed by the Police, Home Office and DfT in January 2005. This sets out roads policing priorities and operational enforcement practice. Publicity to inform the public about new or existing legislation is also important in encouraging compliance.

School journeys

106. Around one sixth of child road casualties are recorded as happening on the journey to or from school, so this is an important area to focus on. Child pedestrian accidents often happen close to home as well as near schools, so work to improve the safety of school journeys needs to focus on the whole route, not just the area around the school.

107. School travel is also receiving much attention because of its links to policies relating to reducing congestion and pollution, by promotion of cycling, walking or using public transport for journeys to and from school. Promotion of cycling and walking, including on school journeys, is also linked to policies to improve children’s health. Road safety activities need to be fully integrated into other school travel policies. Care needs to be taken to avoid giving mixed messages regarding travel advice, especially in

many rural schools, as it may not always be safer to walk or cycle than to come by car.

Cross-cutting themes

108. The strategy outlines 21 specific actions under these thematic headings, but there are some wider issues that affect them all. These will also need to be considered when it comes to taking forward the actions.

Regeneration

109. In recent years there has been much activity, especially at local level, focussed around regenerating deprived areas. This is mainly about improving the local economy and environment and not specifically related to road safety. We know that deprived areas generally have a poorer road safety record, which is why we introduced a separate target to reduce casualties faster in deprived areas. There are a number of reasons for this, including the wider environmental and economic conditions. So these other regeneration activities can also help to meet road safety targets. There are clear benefits to be had by bringing together the implementation of regeneration and road safety activities and from co-operation between the different bodies involved in delivering them at local level. The Neighbourhood Road Safety Initiative (NRSI - see below) shows a number of examples of this.

Partnership working

110. NRSI also provides examples of how partnership working can benefit the delivery of road safety initiatives and also wider social and environmental improvements. This applies in all parts of the country, not just deprived areas and at national as well as local level. It includes co-operation between different parts of local authorities, as more can be done where road safety officers, highway engineers, education departments and those involved in wider social, environmental and economic issues work together and build on their common interests. There is also much to be gained by co-ordination of initiatives by local authorities, police, fire and health services, especially as road safety measures can contribute to other wider objectives like improving health or reducing crime. Community involvement has also been shown to help with the implementation and sustainability of road safety measures, including residents' groups and partnerships with voluntary, faith and commercial bodies.

Funding streams

111. DfT spends money on publicity and educational resources - which are generally freely available to others to use - and on our road safety research programme. DfT's small grants fund supports range of innovative small scale road safety initiatives by voluntary groups. The Highways Agency, which is an executive agency of DfT, funds improvements to and maintenance of the trunk road network in England. However, most road safety activities are undertaken by local authorities. Capital spending on local transport, including road safety measures, is funded through the Local Transport Plan (LTP) system. Revenue spending on education and publicity is met from local authorities' own resources, including general revenue support from central Government, council tax and other local charges such as parking fees.

112. From April 2007, we are providing a new element of revenue funding through the LTP system for road safety measures, to replace the previous safety camera funding arrangements (see paragraph 168 below). We have also introduced a new Â£4 million road safety partnership grant for local authorities. We invited bids from all local highway authorities in England by 2 January 2007, with successful applicants notified by the end of March 2007. Details of allocated grants will be posted on the DfT website. It is expected that around 20 bids will be supported during its first year, 2007/08. The Road Safety Partnership Grant scheme is intended to promote:

- the establishment and sharing of sustainable good practice in road safety delivery;
- partnership working amongst local authorities and others;
- mainstreaming the successful activities and approaches pioneered in recent DfT road safety projects, particularly those which address the impact of disadvantage on road safety.

113. Other sources can also be used to fund road safety schemes. For example, a number of local authorities have made use of the Neighbourhood Renewal Fund for various road safety measures. Funding for some specific schemes in deprived areas has also come from the New Deal for Communities, the Community Regeneration Fund and the Performance Reward Grant.

Target groups

114. Our overall target is to reduce fatal and serious injuries for all children in Great Britain aged 0-15 by 50% by 2010. By 2005, fatal and serious child casualties had reduced by 49% below the 1994-98 baseline. However, there was variation within that overall target and some areas are greater priorities for further action than others. We need to look at the most common types of casualty and also where casualties have not reduced as much as for other groups.

115. Casualties in the 11-15 age group have fallen by less than for younger children, so **teenagers** are a priority. At all ages, **boys** are generally more involved than girls. Child **pedestrians** are a particular priority, as they account for most fatal and serious casualties. There is also a significant number of child **car occupant** casualties, though a smaller proportion of these are fatal or serious. We are actively encouraging more children to **cycle**, to encourage improved health and fitness, so need to take account of their safety.

116. Relatively few child casualties are **bus** occupants, but there has been a slower rate of casualty reduction than for pedestrians, cyclists or car passengers. Even fewer (mainly older) children are injured on **mopeds** or **motorcycles**, as both passengers and riders, but this is the only casualty group to have seen an increase in casualties from the 1994-98 baseline.

117. **Disadvantaged areas** still have a higher casualty rates than elsewhere, including child casualties. Some road safety activities, such as NRSI and the Kerbcraft child pedestrian training scheme have been focused on disadvantaged areas and that focus will need to continue. More generally, **urban** areas and **rural** areas have different circumstances that require different approaches. We also need to consider the different circumstances of children in different **social and ethnic groups** and children with **disabilities**, or whose parents or carers have disabilities.

118. In order to improve child road safety, we also need to target people and groups other than children themselves. **Parents and guardians** are the primary source for educating and influencing children in their everyday activities - including using the roads. They set an example for their children in their own behaviour when crossing roads or travelling in cars. Children are also influenced in their behaviour by their **friends and peers**. **Teachers and schools** are also important in providing road safety messages to children and more generally influencing their behaviour for example on school journeys.

119. Other bodies can have a similar role in the care and wider education of children, for example **health care and social welfare professionals** and organisers of out-of-school activities or **youth groups**. **Local authorities** and the **police** also have significant responsibilities for improving child road safety, while the **fire and rescue service** also plays a part, especially in education and training.

120. All **car drivers** and other road users also have a responsibility to take account of the presence of children on the roads. The **vehicle industry** can also help to improve child road safety through the design of cars and safety equipment. A number of companies also actively promote road safety programmes.

6. The strategy

121. This section outlines what the Department for Transport is doing to improve child safety and to deliver the 2010 casualty reduction target. It describes some other examples of good practice being taken forward by local authorities and others, looking at activities related to each of the themes in the previous section.

122. The action points mentioned in this section show where the Department intends to take forward further work. They are summarised in the action plan at the start of this Strategy. Some of the activities are aimed at particular target groups (e.g. teenagers, parents), while many will benefit all children and some will affect all road users.

Education / training / lifelong learning

123. A key element of the Department's work to promote road safety with primary school children is the **Kerbcraft Child Pedestrian Training Project**. Trained local volunteers, mostly parents, train small groups of 5-7 year olds at the roadside. Kerbcraft covers three basic skills: finding safe places, crossing between parked cars and crossing near junctions. This is much more effective than training that takes place off-road or in simulated environments.

124. DfT has provided up to Â£9 million from 2002 to 2007 for a national pilot programme of Kerbcraft schemes. Over 100 pilot schemes have been established in local authorities across England, each with a dedicated co-ordinator. All have been established in areas of social deprivation, because child pedestrian casualties have shown to be at a higher level in such areas. There are three tranches of schemes, each comprising a number of schemes around the country, running at the same time and each lasting three years. Tranche one ended in spring 2005, tranche two ended in spring 2006 and tranche three schemes end in Spring 2007.

125. A Resource Pack for Kerbcraft volunteer training has been developed by MVA, who have administered the Kerbcraft scheme for the Department. It provides reference material for Kerbcraft co-ordinators, reinforcing the key objectives and methods for training each of the Kerbcraft skills at the

roadside and complements the training video.

126. Evaluation of the Kerbcraft pilot is under way and reports when the scheme ends in spring 2007. So far there have been positive results, with trained children performing significantly better than untrained children. Research to identify why children in the lowest socio-economic group are more likely to die in a pedestrian road accident than children in the highest social class is also part of the evaluation.

127. In September 2005 DfT wrote to all local highway authorities, asking those taking part on the Kerbcraft pilot to consider continuing Kerbcraft or expanding it to new areas in their authority once current pilot schemes end. Other authorities were asked to consider introducing Kerbcraft and some are now doing so, for example Merton, Daventry and Northants Primary Care Trust.

128. Most authorities who had tranche one Kerbcraft schemes have continued with some form of practical roadside child pedestrian training or are planning to do so. However, most of these have made modifications and are not continuing with Kerbcraft itself. The Kerbcraft evaluation will also look at what authorities have done once the pilot and DfT funding have ended and how these modifications affect the quality of the training. Once the evaluation is complete and the pilots come to an end in Spring 2007, we will put in place a dissemination strategy to inform local authorities of the outcome and provide information to those continuing or establishing Kerbcraft schemes.

ACTION 1 - DfT encourages wider use of Kerbcraft and similar measures and will do more to encourage wider take-up following the evaluation of the pilot schemes. We will put in place a dissemination strategy to encourage local authorities in continuing to provide Kerbcraft training.

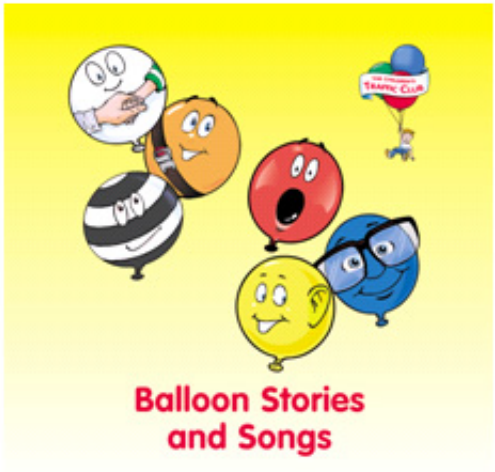
The **Crossroads** CD Rom, providing computer-based pedestrian training for 7-10 year olds, was launched in spring 2005. It has been marketed as following on from Kerbcraft, though it can be used independently. The designated crossings programme is incorporated into the Crossroads CD. Like Kerbcraft, success depends on the involvement of trained adults.

129. The Children's Traffic Club (CTC) is aimed at pre-school children and provides a structured programme for parents and carers to engage three to five year olds in fun and interactive ways, teaching them how to stay safe walking, playing, travelling in cars and on buses. It is backed by research into developmental psychology, which documents that personality traits and life long habits are set by the age of five. It has been running free to all three year olds in Scotland since 1995. Many areas throughout

England have been using it in a variety of ways. In Wales it is available in all counties bilingually and has also been running across London since 2003. The scheme aims to:

- reduce casualty rates of the target age group
- influence long term behaviour of children who become members
- indirectly benefit other family members e.g. older children and parents
- project and enhance the CTC brand - its trustworthy, successful reputation
- promote a model that can be replicated regionally, nationally and internationally.

130. CTC works in partnership with local authorities and health authorities, who provide the materials free to parents. In participating areas, every three year old is invited to join the Club around their third birthday, via the health authority, using their protected GP data. Once registered, the child receives one book pack every three months, sent directly to their home. The books are full of pictures, stories and fun activities, carefully structured for the child's emotional and intellectual development. Characters within the books represent the main ethnic groupings. The stories cover all socio-economic groups, as well as rural and urban environments. All the relevant safety messages are reinforced by engaging balloon characters. To increase effectiveness, parental information is kept to the vocabulary level of 9 year olds - the national reading age for adults.



131. Working in partnership with Sure Starts and in association with Early Years Establishments an Early Step Resource Pack has been developed as an extension to the core Club material, to help tackle the problem that children from disadvantaged backgrounds are up to five times more likely to be killed or injured in a road accident than their peers from more affluent areas. A specially adapted version of CTC has been created by the Neighbourhood Road Safety Initiative (NRSI - see below) in Salford, working with DBDA, the publishers of CTC. The material has been simplified to the reading age of five and is more pictorial for individuals who have literacy difficulties or for whom English may not be their first language. Key road safety messages are available in CTC material in the 22 main languages in the UK (the top five for each London borough).

132. Partnerships play a key role and partners support the CTC core material but also actively use specific Children's Traffic Club material designed for them. Partners include:

- Nurseries and Playgroups (over 10,000 nationally)
- Childminders
- Health Visitors
- Sure Starts and Early Years Centres
- Road Safety Officers
- Health practitioners and doctors' surgeries
- Libraries

The **A-Z of Traffic Tales** was launched across London in September 2005 and includes a set of Big Books that takes road safety through literacy and PSHE and Citizenship. Early research has been positive and TfL is now launching a set of small books and an interactive whiteboard a-z. All Key Stage 1 schools and all Road Safety Officers in London have one or more sets to use with each year group.

A picture book entitled **'It's fun to go out but...'** for parents who may not have high levels of English literacy has been developed with the Child Accident Prevention Trust (CAPT) to promote road safety messages aimed at giving parents simple visual information on keeping their children safe on the roads. This was launched in March 2006 and can be distributed to parents via RSOs, health practitioners and teachers.

BMW Group has provided **Safe on the Street** as a free web-based resource for 7-11 year olds which has proved to be popular with teachers nationally. In September 2006, BMW Group launched a free web-based resource called Cool Wayz - aimed at the transition age group 10-12. Cool Wayz develops students' skills in selecting appropriate transport, planning safer routes, and understanding peer pressure, risks, decisions and consequences for their personal safety. Cool Wayz covers PSHE/ PSE/PSD and Citizenship areas.

The Sunni Muslim Association is developing an **Arts Based Community Road Safety Project**, with Â£18,000 DfT funding. This is a neighbourhood-based project based in Brideoak Street, Cheetham, Manchester, working in partnership with a wide range of agencies including parents and young children. The project involves joint working with Sure Start, Primary Care Trust, Youth Service, Mosque leaders, community artists, local schools and taxi firms. It highlights local road safety issues by producing artwork and a drama based on road safety education and to deliver road safety education through artwork in the form of an exhibition/drama to other environments using a peer led educational approach. The work developed will be showcased in other similar disadvantaged communities. Six community events are being organised where key road safety issues will be identified and prioritised for a community artist to tackle through art based work.

133. Various educational resources aimed at conveying road safety messages to **teenagers** are already available or being developed, but there is still scope to do more. Key projects include the following.

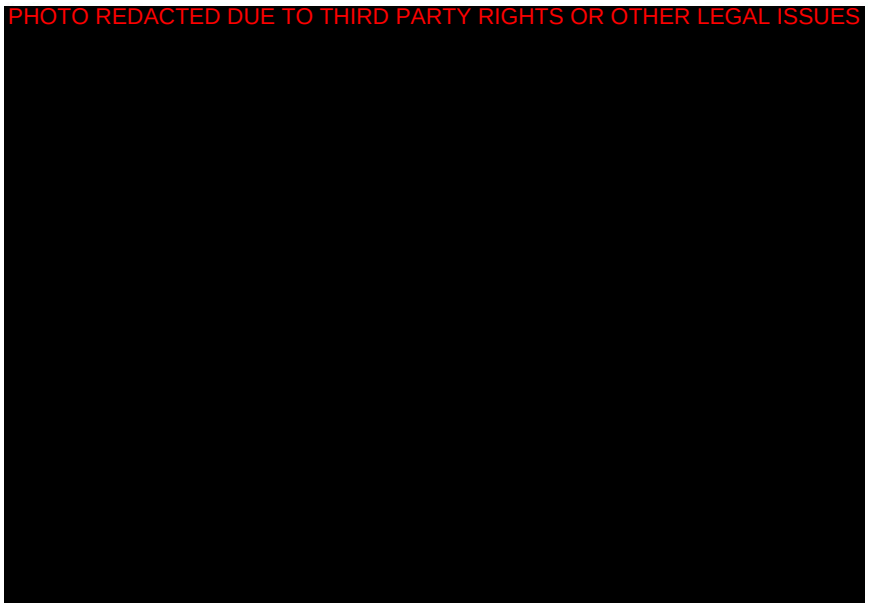
Create a future/Setpoint have developed a resource pack called "**Solving the problems of road safety**", with DfT funding of Â£20,000. The project will contribute to the improvement of road safety by working with year 6 primary school students on solving road safety problems in their locality within the context of science, technology, engineering, mathematics (STEM). The pack has been circulated to all SETPOINTS for their use.

RoSPA has developed "**Road Safety in Citizenship CD: A Key Stage 4 Resource: Additional Topics**", funded with Â£16,656 through DfT's Challenge Fund. This project produced additional Student Topics and accompanying Teacher's Notes for the "Road Safety in Citizenship CD: A Key Stage 4 Resource" which was produced with DfT funding in 2004. The new topics, published in March 2006, cover various aspects of motorcycling, introduction to occupational road risk issues, speed and crashes.

The Motorcycle Industry Association (MCIA) has developed a resource called "**Links - connecting Citizenship and Road User Education**", available from spring 2006 to be used in secondary schools for key stage 4 pupils, containing Road User Education elements for inclusion in the Citizenship syllabus. This provides lesson plans on general road safety issues and is not specific to motorcycling. It is in 12 modules that fit into the existing Citizenship syllabus. MCIA will be monitoring its use. MCIA also launched **a DVD on scooter and moped safety, "Act Your Age"**, in January 2006, which is aimed at people learning to ride mopeds, from the age of 16.

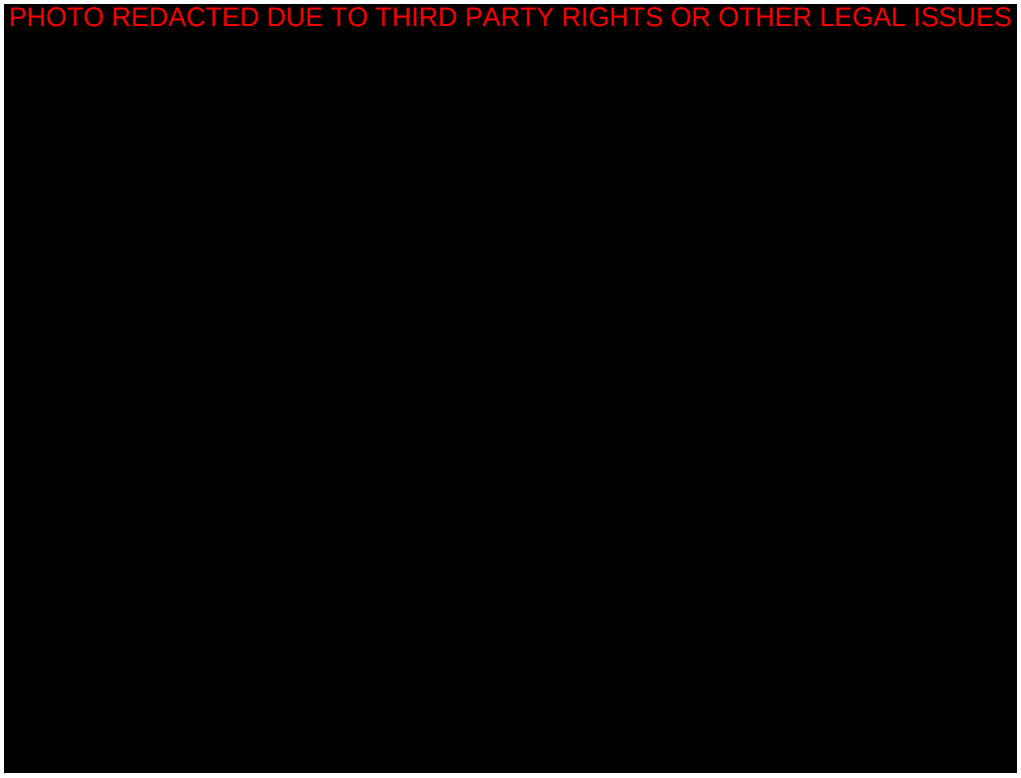
The Driving Standards Agency (DSA) has produced a road safety programme called "**Arrive Alive**". These are presentations for use by driving examiners in schools and colleges, armed forces, youth football teams, probation service and young offender units, to get road safety messages to people preparing to learn to drive. DSA "Arrive Alive Bike" was launched 1 September 2005, with the same aim for prospective moped and motorcycle riders.

134. **Role playing and theatrical presentations to teenagers** can be effective in conveying road safety messages when part of a planned programme. For example, with DfT funding of Â£20,000, the Ape Theatre Company produced their drug/drive play 'Pills, Thrills and Automobiles'. The play, which is aimed primarily at 16 to 18 year olds, aims to reduce drug/drive related accidents, through interaction, provocation of thought and consequences. NRSI has experience of working with a Theatre in Education company and of using this to develop road safety knowledge and skills and drama skills in teachers. This may offer a more sustainable way of using Theatre in Education. The Fire and Rescue Service has also developed road shows, multi agency theatres or classroom productions using actual service members and real incidents with scripted storyboards. The Chief Fire Officers Association has produced a catalogue of these interventions targeted at risk groups.



RoSPA published "Dramatic Impact; Guidelines for commissioning and implementing Theatre-in-Education (TiE) for road safety officers and other professionals" in March 2003, with DfT funding. RoSPA is now working on "Theatre-in-Education: Teacher's Support Pack", due to be published in March 2007, also with DfT funding of Â£16,000. This will be a resource to help schools maximise the road safety education benefit of visits by TiE companies by helping them to prepare for the visit and to conduct activities afterwards to reinforce its road safety messages. It will encourage teachers not to treat the TiE visit as a one-off event by providing examples of classroom activities that can be conducted before, but especially after, the visit. It will also give advice on using drama techniques and exercises that can stimulate classroom work.

The Society for the Advancement of Black Arts has been running **Safe Stepping**, a project for a national Road Safety Awareness campaign for young people, with Â£19,000 DfT funding. It is aimed at built up, disadvantaged, urban areas in London, Birmingham, Manchester, Leeds, Bradford, Cardiff and Glasgow. The campaign works with networks of local community groups. A music showcase and talent show is run at a selected venue in each of the areas around the road safety message "Safe Stepping". "Safe" is a street slang term that means everything is OK, as well as being safe. "Stepping" is the term used to describe getting from A to B whether by walking, riding or driving. Categories are for the age ranges: under 11s, 12-15s and 16-19s. After the initial events a grand finale will be held in London in March 2007, where selected winners of the regional events will be invited to take part, whilst contributing members of the community groups would be able to attend. "Safe Stepping" is supported by a PR campaign using national press, local press, internet, digital TV, internet radio, web site promotion and sms texting. By the finale, it is aimed to have 2,000 children and young people registered as "Safe Steppers" across the UK.



135. There are currently two DfT research projects on road safety education under way.

One is a research project on improving the delivering road safety education, being undertaken by MVA. It is looking at the delivery of road safety education in schools and also the role of local authority Road Safety Officers. It is due to report in mid-2007.

The other research project is on pre-driver education, reviewing when children and young people develop their driving style and attitudes towards driving safely - it is clear from evidence already reviewed that this is well in advance of their driving lessons. It has been carried out by Air Affairs and the report, including a review of the literature, identifies good practice. It will be published in the first half of 2007.

ACTION 2 - DfT will continue to promote good practice in the delivery of Road Safety Education (RSE), in the light of findings from the current research projects on RSE and pre-driver education.

136. A new National Standard for Cycle Training was first announced on 10 March 2005. It was developed by 20 or more road safety and cycling organisations. The Cycle Training Standards Board has been established to oversee the standard. The new standard to be called Bikeability in England will replace the old style RoSPA cycle proficiency test. A gearing up stage was launched in September 2006 following the award of additional funding for cycle training by the Secretary of State. The plan is to roll out the delivery of new standard in schools over the next few years. We plan to increase the number of year 6 children receiving cycle training in schools from the current one third to half over the next few years. The main difference is that the new standard includes on road training and has three different levels for children to aspire to. These are :-

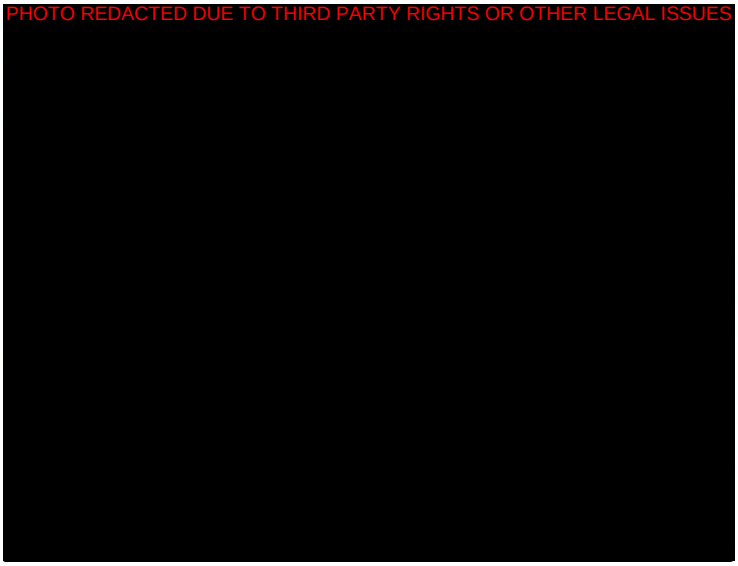
- Level 1 (aimed at 7 year olds). Beginners and basic cycling skills - held off-road and teaching children how to control, balance and manoeuvre;
- Level 2 (aimed at 9/10 year olds). Introduction to on road cycling - held on quieter roads in groups, children will learn where to position themselves when riding on the road and how to observe traffic, signal, turn/manoeuvre safely and basic highway code;
- Level 3 (aimed at 11/12+ and adults). Advanced cycling - held on busier roads to teach skills required for making longer journeys and to develop strategies to deal with all types of road conditions - e.g. roundabouts, traffic lights, multi-lane roads.

137. The key aim is to deliver Level 2 training in schools which will allow most children to cycle to school, except where roads are too dangerous.

138. Cycling England, DfT's advisory body charged with increasing cycling levels are co-ordinating the additional spending on cycle training through their Youth Programme, one of their five key work themes. Cycling England operate under a banner of *More Cycling, More Often, More Safely*. With an increased DfT budget of Â£10m per annum for 3 years Cycling England are providing grants and bursaries to bring about increases in cycling to school. With funding of over Â£1m the aim is to provide at least 1,200 new cycle trainers by 2008 as well as increasing the number of accredited training centres. Over 10,000 children will be funded by DfT to receive national standard cycle training in the early part of 2007. A further Â£15m is to be spent over 3 years 2006-07 to 2008-09 on additional cycle training in schools and on additional safe links to school which join up with the existing National Cycle Network.

ACTION 3 - DfT will work with DfES, Cycling England, the Cycle Training Standards Board, local authorities, RoSPA, schools, and cycling organisations to ensure the new National Standard is introduced more widely in the next few years and that the standard will continue to ensure safe priorities are followed.

139. **Parents** and carers have an important role to play both in teaching their children about road safety and in setting a good example every time they travel. This includes parents and guardians and also others who are directly involved in childcare, such as professional child minders or grandparents. Research by Leeds Metropolitan University into child-parent interaction will help to determine how best to encourage parents and carers to do this and is due for completion in March 2007. NRSI has commissioned research by Leeds Metropolitan University to complement this study by looking at child-parent interaction in black and minority ethnic communities.



140. The role of parents is not limited to teaching children to cross the road. Most parents are also drivers and are responsible for the safety of their children as car passengers. More than a third of child casualties are car occupants, including one fifth of those killed or seriously injured.

Dorset County Council has developed a scheme to address this issue, called **Parent Safety Drive**. This offers parents an hour in the company of an experienced driving instructor, in their own car if they wish, who will be able to pass on useful defensive driving and hazard awareness advice and tips, using local roads. There is no test and no assessment, just friendly constructive advice. The aim is to help reduce the risk of an accident and it provides a chance for parents to refresh skills, perhaps for the first time since their driving test.

The **Blurton Dads Group** project in Stoke on Trent sought to improve road safety on a particular estate by focussing on cycle-related activities including training. The project had wider community and regeneration outcomes and successfully engaged men, who tend to be less involved in such activities.

141. There is scope for making more use of regular points of contact between public sector bodies and parents to get across messages about road safety, such as child health checks or school parents evenings. For example, pre-schoolers have periodic health check-ups and the child's medical book contains very basic road safety information, including checks on ownership of a car seat. But more could be done, including for older children. This could also involve organising local road safety events aimed at parents, or encouraging parents to become involved in road safety activities, for example as volunteers in child pedestrian training schemes such as Kerbcraft. The research on child-parent interaction could help to identify further opportunities for communicating road safety messages to parents. We will work with other Departments to take this forward.

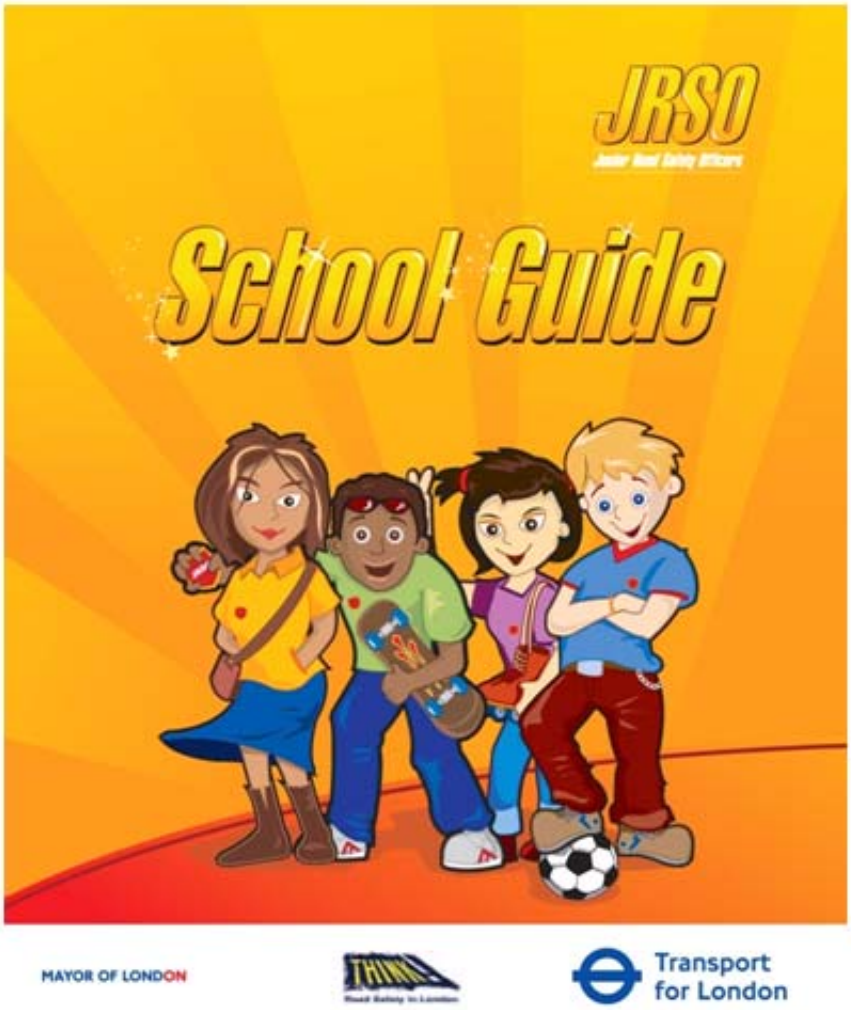
ACTION 4 - DfT will look for new opportunities to deliver road safety messages to parents and guardians and will encourage local partnerships to implement them.

142. **Friends and peers** can be persuasive in encouraging good road safety behaviour and attitudes amongst children. They can also show poor behaviour, so anything to encourage children, of all age groups to look out for each other and set each other a good example would be beneficial.

143. We plan to review the potential value of peer education later in 2007. This work is linked to that being conducted on how children and parents interact. We will need to consider how to target peers, in different age groups. As well as peers in the same age group, this could include the use of peer tutoring involving older children working with younger children, potentially benefiting both without seeming patronising.

144. We are also currently reviewing peer to peer marketing as an option for a three year publicity engagement strategy. All publicity aimed at 11-16 year olds includes the message to look out for each other.

145. **Junior Road Safety Officers** have been used in some areas, for example by TfL in London. Children themselves take a leading role in promoting road safety messages amongst their peers, which can be an effective way of delivering Road Safety messages. Child-based research has been used by the Open University for a project on school travel. This involved getting children to undertake research amongst their peers into their attitudes and behaviour. This approach could also be used in a road safety context.


JRSO
School Guide
MAYOR OF LONDON
THINK!
Transport for London

146. NRSI also has examples of this kind of activity. Several NRSI projects demonstrate how partner organisations can be involved in road safety related activity. Examples include:

Wigan Road Safety Conference. Young people from Wigan, supported by NRSI and Positive Futures, the Wigan Youth Service organised and took part in a thought-provoking conference designed to get them actively involved in promoting road safety. Young people aged 8-19, professionals working with young people and local councillors attended the conference. It included a road safety play written and performed by a local Youth Theatre Company, workshops on drink/drug and road safety awareness, cycle training and maintenance and first aid.

Fusion project in Oldham. There have been several Fusion projects, which have aimed to target community cohesion. The projects have involved young people within secondary schools. The 05 Fusion differed slightly as an underlying road safety theme was introduced & maintained throughout. Fifteen secondary schools were invited to nominate 2-4 peer leaders from Year 10 to take part in a residential weekend including a wide range of activities meeting Fusion's project aims. Activities included mountain biking, caving, and road safety shows devised & written by the participants.

The road safety aims of the Fusion Project were:

To raise participants' awareness of Road Safety dangers & issues

For those young people involved to disseminate this new Road Safety knowledge via school and youth groups

It was intended that the young people who took part in the Fusion 05 Project would report back and influence their peers once they returned to school, by means of presentations, assemblies or PSHE classes.

Blackburn Kick Start. A group of young people identified as 'at risk' of committing driving related offences participated in the Kickstart project. The project was designed to reduce the number of potential casualties resulting from dangerous or illegal driving and to get them to think about potential consequences.

Kickstart set out to achieve the following objectives: -

- Introduce young people to safer driving
- Train and support young people to deliver peer education
- Briefly introduce young people to safer driving using a driving simulator

The project included a programme of driving or simulator lessons and presentations from the Police, Fire & Rescue Service, Paramedics and from the Lancashire Council of Mosques on drug awareness.

Norley Adventure Playground, Wigan. Staff from Wigan Leisure Culture Trust's play section worked with local children to develop NRSI-funded improvements to an adventure playground. They used child-friendly consultation methods and the children chose items of equipment for the playground. The play workers also took the opportunity to involve the children in discussions about road safety. They talked about different places to play, about potential dangers, and about whether they travelled to the playground alone or with an adult. A game of "NRSI Bingo" encouraged the children to recognise road signs and to understand the warnings they contain. They also made reflective articles to wear in the dark at an arts and crafts session.

Queen Elizabeth High School drama, Rochdale. The drama teacher collaborated with a locally based Police officer to work with pupils to produce a hard-hitting road safety play that was performed at NRSI's annual conference.

ACTION 5 - DfT will research the scope for promoting child-based approaches to promoting road safety within peer groups.

147. A significant number of teenage car occupant casualties, both boys and girls, are in cars driven by **young drivers** not much older than themselves. 16% of car user casualties aged 11-15 are injured in cars with drivers aged 16-19, compared with just 2% of casualties aged 0-10. So any initiatives to improve the safety of young drivers will also benefit their younger passengers. This includes pre-driver education aimed at encouraging safer attitudes to driving amongst children before they start to learn to drive.

148. A range of measures is already in place to support **road safety education (RSE)** in schools. A web based database of road safety education resources was launched in spring 2005. DfT has retained the services of educari for promoting, updating and maintaining the database to date, and is intending to maintain this resource as an integral part of the THINK! website in the future The database highlights

resources for people with learning difficulties and enables providers to publicise their materials. Guidance to promote evaluation of road safety education by RSOs was issued in 2004 and is available on the DfT website.

There is currently no specific wheelchair user road safety training provided for professionals. The **Whizz Kidz Road Safety Professionals Training Course** project is being undertaken by The Movement for Non-mobile Children (Whizz Kidz), with DfT funding of Â£20,000. It includes the development of course materials, the production of a video highlighting the need for training for this specific group of road users and piloting a course for 5 applicants. Training courses are on-going and the DVD was completed in May 2006. The first public viewing of the DVD took place at the Mobility Roadshow in June 2006. Copies are now available for all road safety departments.

Educari Ltd is developing a resource **Road Safety for Students with Special needs**, with DfT funding of Â£19,600. This project will produce a resource for use by educators, with a wide range of children, and young people with special needs, focusing on Key Stages 2 to 3. The resource will consist of a DVD and Educators' Booklet. The DVD will contain a series of interviews with children and young people with special needs and some of their parents or carers. These interviews, presented in a lively 'MTV-style' fashion, will explore the particular issues faced by children and young people with special needs in relation to road safety. The DVD will also include questions, activities, etc, which will make it a valuable educational resource. Free copies of the resource should be available in June 2007.

RoSPA's rural teaching resource was published in spring 2005. The Department plans to work with RoSPA to see if this resource could be used more with the THINK! campaign.

149. Educational resources produced by the DfT are regularly reviewed. Get Across Road Safety Book 2 (for parents of 7-11 year olds) was revised and reissued in May 2004 and Activity Book 1 (for 5-8 year olds) was revised and reissued in March 2005. Focus groups have been run with teachers to gather opinions on materials and new research on our range of child road safety materials will be carried out with a Child Panel to be set up early in 2007. Both the THINK! website and the Hedgehogs website will be refreshed and extended in 2007 and the online teaching database and lesson plans will be reviewed. Consideration of materials will take account of the needs of people in areas of disadvantage and with particular language or literacy needs.

ACTION 6 - An audit of all educational and publicity resources produced by the DfT will be carried out in 2007 and they will be reviewed annually to ensure they are well targeted and effective.

ACTION 7 - DfT will revise and reissue "Arrive Alive - A Highway Code for Young Road Users", following launch of the revised Highway Code in mid-2007

150. Road Safety Education (RSE) can be integrated into a range of curriculum subjects, including personal, social and health education (PSHE) and citizenship as well as more traditional subjects. DfT provides resources and guidance about how to teach road safety in various curriculum subjects at all ages. There could be scope to integrate it further into health and education initiatives. Much of DfT's material is independently evaluated and guidance on evaluation has been issued. Road safety and safe travel are included in guidelines for PSHE in England, though this is not a compulsory part of the curriculum.

ACTION 8 - DfES will help promote safety tips and programme materials through its curriculum guidance.

151. Further measures that could be adopted in schools could include:-

- Schools could establish a champion for Road Safety Education, ideally a senior teacher or active governor, or a committee of governors, teachers, senior pupils, Road Safety Officer and police and fire officers, specifically concerned with RSE. Their role would be to safeguard the time and effort available from teachers for RSE against curriculum pressures.
- RSE in schools could be planned a year or more in advance for every age group as part of the school curriculum development plan.
- Parents' Charters which parents or guardians sign when their child joins the school. This outlines their involvement in RSE and raises awareness of their contribution to their child's safety.
- Pairing rural schools with urban schools, to exchange information and visits to give children insights into different traffic environments.

152. Other bodies also have a role to play in promoting road safety education, in particular local authorities, police and fire services and health agencies. Local highway authorities (county councils, unitary authorities, metropolitan and London boroughs) have a statutory duty to promote road safety in their areas. Most have Road Safety Officers (RSOs), who carry put a range of road safety functions including working with schools. Police and fire services also have a clear interest in road accident prevention and also work directly with schools in many areas. They may also have credibility with children. Health services also have a role in promoting children's health and well being generally, so there is a clear link with road safety. The Think! publicity campaign also works with police and fire services.

DfT's guidance to local authorities 'On the Safe Side', on good practice in road safety education, includes guidance on presenting road safety education as an essential element in the continuous education and development of citizens; developing road safety officer specialisms; involving elected members in promoting road safety; monitoring school activities by means such as RSE resource stock-tracking and teacher and student questionnaires.

ACTION 9 - Road Safety Officers, police, fire and health services should work together to co-ordinate their activities in schools and elsewhere. They should ensure that officers who work with schools and other bodies are trained to do so. All should ensure that road accident prevention is considered when establishing accident prevention programmes or healthy schools schemes as well as in the design and delivery of road safety interventions and packages.

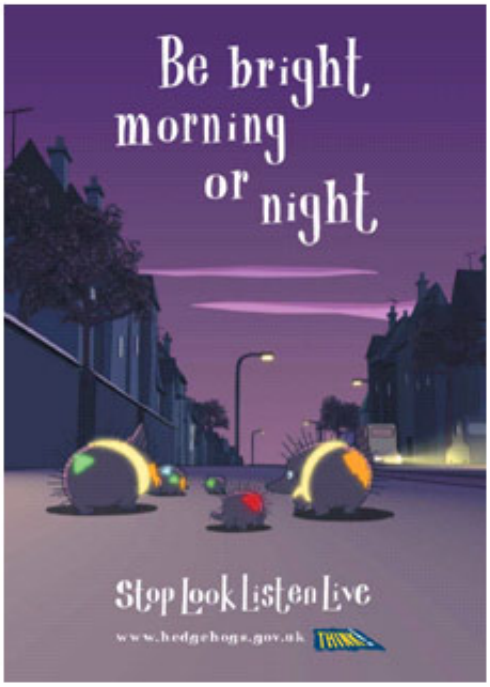
Publicity

153. The DfT's Think! campaign promotes road safety messages in various ways. Child safety is a key element of the campaign, which includes advertising, educational resources and the Think website, which contains material aimed at children as well as lesson plans for teachers. Publicity also needs to be addressed to parents and to other road users - drivers and riders - who all need to be aware of child safety.

154. The Think! campaign has different strategies for younger children and for teenagers, given the very different ways needed to approach the different age groups effectively. More information, including details of campaigns, can be seen at http://www.thinkroadsafety.gov.uk.

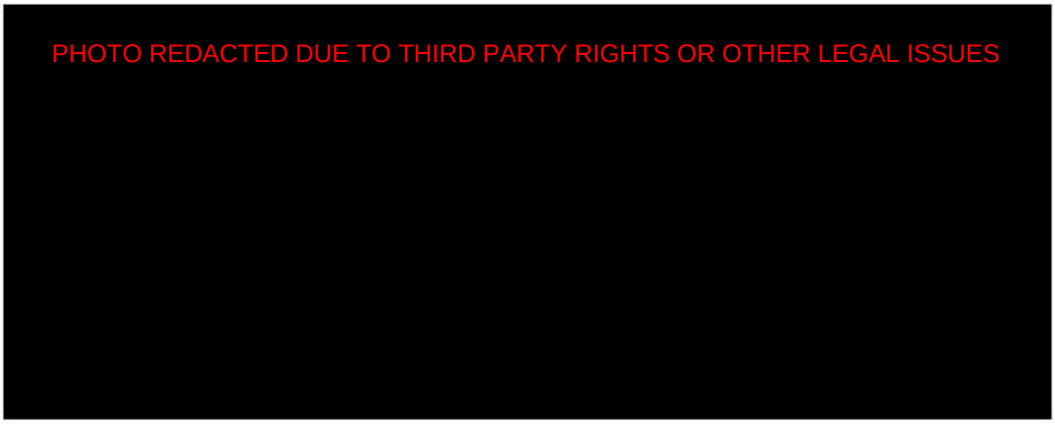
ACTION 10 - The Think! campaign will continue to promote child road safety, taking account of evidence-based prioritisation for targeting and marketing.

155. The THINK! Hedgehogs campaign, which includes TV, cinema and online advertising, a website, posters, stickers and other materials, is targeted at 7-10 year olds. New sing-along versions of the cinema advertisements and new Be Safe Be Seen online advertising were launched in 2006. We are continuing to develop opportunities to work with brand partnerships as a way of reaching a wider audience. 3M is supporting the autumn Be Safe Be Seen campaign by providing thousands of school children with high visibility reflective vests and producing a web-based road safety resource for primary schools. Little Chef handed out thousands of reflective armbands and activity placemats for children in their restaurants in October 2006 and Whitbread produced activity books for children available at all Brewers Fayre restaurants in October and November 2006. Millets developed a range of high-visibility clothing, footwear and rucksacks for children and the Nationwide Building Society distributed reflectors to every new primary school child in the UK.



ACTION 11 - DfT will research the appeal of the hedgehogs campaign for 5 to 11 year olds. We will consider what publicity would be most effective for this age group and whether anything different is needed for 10-11 year olds.

156. A teen pedestrian TV / cinema advert "Distractions", showing the risks of being distracted by a group of friends, was launched in August 2005 and ran during 2006. Research showed that small groups of friends were at higher risk of a road accident because they were paying less attention to the road than when on their own. Supporting posters were launched in September 2005 and ran again in September 2006 and January 2007. New advertising, including approaches for radio was launched in autumn 2006.



157. We have researched the effectiveness of the "Distractions" campaign. Conducted by Childwise, evaluation of the third wave of advertising in September 2006 showed the following:

- 56% of those asked recalled seeing the campaign without being prompted
- Of those who had seen any road safety TV advertising 56% mentioned Camera Phone as top of their mind.
- 76% of teenagers recognised the commercial when prompted.
- 95% said it made them think again about being careful on the roads. 91% said it made them realise it could happen to them.

158. We will be working with MTV in 2007 on a reality TV show, which would encourage groups of teenagers to come up with ideas for road safety commercials. MTV would then invite four groups with the most promising ideas (covering pedestrian, cycling, in-car and possibly pre-drivers) into the studio to learn how to turn the ideas into films. The resulting films would be judged by DfT and road safety professionals in the studio and by the viewers. The winning film will be shown on MTV and we hope to give the film a wider airing nationally. We will undertake in-depth research with 10-11 and 12-16 year olds to re-assess attitudes, behaviour, teen trends, media consumption and the current campaign. We will also set up teen panels, so that we can research creative ideas and track the findings from the above research.

159. The *THINK!* Campaign has been targeting children aged 7-10 with cycle safety messages since 1999. The aims are to let children know how to keep safe while out and about on their bikes, to promote cycling to children; to raise awareness among parents and guardians of the need for safety equipment and general cycle safety and to promote the benefits of children cycling, to parents and guardians. Information on cycle safety for younger children is now included in the Hedgehogs website http://www.hedgehogs.gov.uk.

160. Think! has also promoted cycle safety for teenagers, through the cycle sense campaign and website http://www.cyclesense.net. The Department continues to work with Cycling England to promote cycling and cycle safety in a complementary way. The 2004 cycling TV filler is still aired when possible. Cyclesense, a printed and online resource for teens, was launched in May 2004. A new campaign, skillzonwheelz was piloted in spring 2006, with the aim of engaging teenagers in caring for themselves and their bikes whilst still enjoying the freedom cycling gives them. It was produced in partnership with Emap, who publicised it through their TV channels, websites and magazines. It took the form of a dedicated website including cycle safety information.

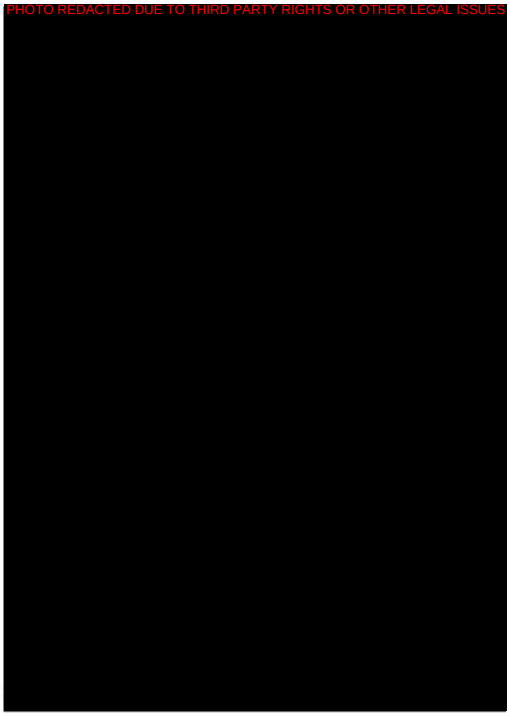
161. In future, we plan to include cycle safety messages within the broader road safety messages aimed at young children and teenagers. This will be informed by experience with the cyclesense and skillzonwheelz campaigns. During 2007 these will be replaced by a cycling element which will form part of the work with MTV.

ACTION 12 - DfT will deliver cycle safety messages effectively, as part of our wider road safety publicity for children, making the most of links between safety and cycling promotion.

162. In August 2006, DfT published an accessibility toolkit, Road Safety: A guide to engaging with your community to advise RSOs and other stakeholders on the best ways to communicate and promote road safety messages to hard to reach groups. This has been promoted on the LARSOA website and newsletter and on the THINK! website. It is available on the THINK! website. These methods are also informing DfT communications plans for 2006-2009.

163. The Department currently has an arrangement with Newham Language Shop to translate DfT's parents' booklets on demand into other languages. We will also consider specific materials for blind and deaf audiences such as Braille or British Sign Language (BSL) videos. We will undertake research with RSOs and the voluntary sector into what resources and communication channels are needed for blind and deaf audiences. We will also look into accessibility for blind people of the Think! Road Safety website. We will produce an audio version of 'Get Across Road Safety' on demand.

164. Drivers, usually parents, have a responsibility for the safety of children who are travelling in their car. The research project on child-parent interaction (see above) includes in-car behaviour. Safety-relevant aspects of the driving test are already in place, including hazard perception testing. Our current campaign on speed, aimed at drivers, includes the 'Lucky' TV and cinema advertisement, which shows how speed has a bearing on the severity of injury if a child is hit at 30mph as opposed to 40mph. However, there is scope for further publicity to reinforce these messages.



ACTION 13 - DfT will develop publicity targeted at parents and guardians, including those who drive, as part of our wider publicity on child road safety. Road safety messages will also be included in our publicity on school travel initiatives.

165. Voluntary groups also produce road safety publicity materials.

Brake's "Road Safety Week", an annual event which the Department has supported for a number of years, providing Â£20,000 in 2006. In recent years we have supported Road Safety Week Action packs which encourage road safety teaching in nurseries, schools, colleges, youth groups etc.

The Department has also supported the **Child Accident Prevention Trust's (CAPT) "Child Safety Week"** for a number of years, providing Â£15,000 in 2006. The theme for Child Safety Week in June 2006 was "Avoid the worst - put child safety first". Child road safety is one of the five key issues highlighted each year. In 2006, 45,500 copies of the ideas booklet were sent out or downloaded and highlights included interviews on Channel 5 and Sky News. Evaluation showed that 73% of activities organised for Child Safety Week involved partnership working and in 93% of cases it was expected that the partnership would continue beyond the week. The Department produced complementary publicity for the CAPT child safety week.

The **Community Welfare Trust Birmingham** has developed a comic hero and magazine called "Safe Man", with Â£8,450 funding from the Department. The comic can be used as a platform to promote some of the main aspects of road safety to children from disadvantaged communities of the inner-city areas of Birmingham. The magazine was launched in September 2005.

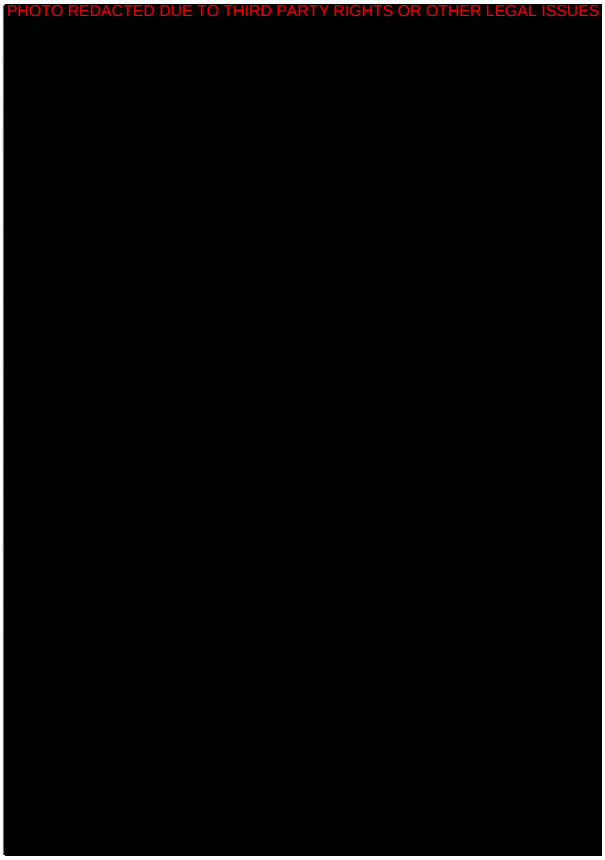
Highway engineering, environment and planning

Planning and local partnerships

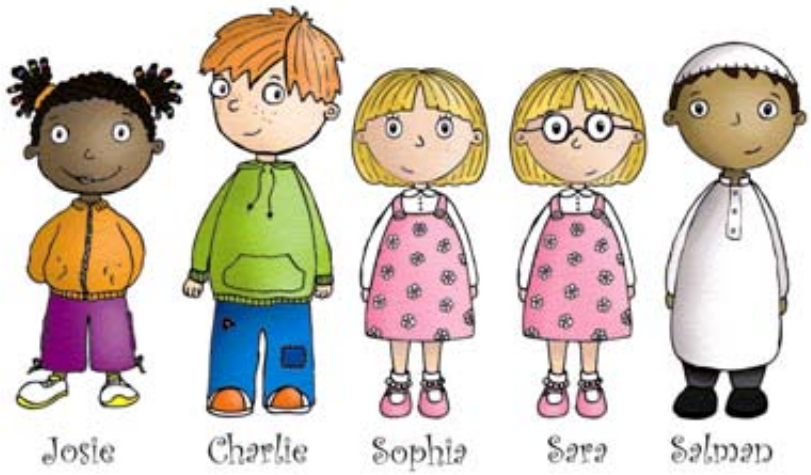
166. The Department is funding a number of demonstration and delivery projects to improve road safety through local authority-led partnerships:-

167. The Neighbourhood Road Safety Initiative (NRSI) was launched in 2002, (as the Dealing with Disadvantage Initiative) aiming to work in partnership with 15 Local Highway Authorities with some of the worst child pedestrian casualty rates in the country. Up to Â£17.6m has been allocated up to April 2007. An interim report was produced in February 2006 by the NRSI central team for the NRSI Project Board, available at http://www.nrsi.org.uk. This will be updated towards the end of the NRSI project, by spring 2007. Progress is being closely monitored and full evaluation of the effectiveness of the initiative undertaken together with the development of good practice guidance for dissemination to other authorities and partner organisations. A literature review on road safety and disadvantage has been conducted as part of the evaluation and will be available in spring 2007, together with an interim evaluation report. The full evaluation report is due in 2008.

Through a local partnership organisation, a **mosque marshalling scheme** was set up in Blackburn. Local volunteers act as marshals to assist children on the journey to mosques, which involves large numbers of children travelling on foot during busy periods, often in the dark. Other authorities have sought to learn from this example, which won a Prince Michael Road Safety Award.



NRSI worked with a group of parents at a local Sure Start centre to develop & write a series of road safety books that were subsequently professionally produced as the series **Salman & Friends**. The books are accompanied by an audio CD in several languages and the material is also available on the web. The books deal with simple messages such as holding hands, stopping, looking & listening, and the need to set a good example when out on the road.



NRSI has commissioned two pieces of research in relation to children. One is being carried out by Nottingham University, using Police accident record files and questionnaire returns from accident involved children/families to analyse the causal factors behind child pedestrian injury accidents in Greater Manchester NRSI areas over a 3 year period. The second is being carried out by Leeds Metropolitan University and is looking at child/parent or carer interaction as pedestrians and in cars. The study involves on-street observations and focus groups with parents. The study concentrates on areas with high BME populations and complements the existing national study being carried out by the same researchers for DfT.

168. In July 2002 the Department invited bids from local authorities to participate in a 5 year Inner City Demonstration Project to show how an area-wide integrated partnership approach to road safety can reduce casualties and improve the quality of life for local people. In June 2003 Birmingham City Council was awarded up to Â£6 million over the period to March 2008 to improve road safety within a defined area of east Birmingham. Local panels and partnerships are participating in the development of proposals.

169. Research has shown that some children from some minority ethnic backgrounds, whether new to Britain or born here, are more at risk of being involved in a road accident. Further work on this will be included in the evaluation of the Kerbcraft child pedestrian training pilot, a case study involving two different schools with high proportions of minority ethnic populations. DfT will also assess issues of road safety and ethnicity, cultural factors and diverse communities as part of the Inner City Demonstration Project and the Neighbourhood Road Safety Initiative.

170. The Mixed Priority Route Demonstration Project aims to test the effectiveness of developing and implementing practical traffic engineering solutions to address road safety issues on mixed priority routes, in partnership with local authorities. Ten Mixed Priority Route Demonstration schemes are under way looking at how the competing needs of through traffic and local communities might be better accommodated. All ten projects will be monitored and evaluated with the view to forming a good practice guide which will help other local authorities wishing to develop similar schemes in the future. The target date for completion is December 2007.

ACTION 14 - DfT is monitoring and evaluating the road safety benefits of the NRSI, Inner City and Mixed Priority Route demonstration projects, including issues of ethnicity and diverse communities. We will disseminate good practice in 2007 and will update it after the projects and evaluation are complete.

171. Home Zones are residential areas designed with streets to be places for people, instead of just for motor traffic. By creating a high quality street environment, Home Zones can strike a better balance between the needs of the local community and drivers. Whilst primarily aimed at improving quality of life, Home Zones can also have road safety benefits.

In 1999, nine Home Zone schemes in England and Wales were piloted. The Home Zones Challenge, which ran between 2001 and 2005, provided a Â£30m fund to encourage the development of 59 new schemes in England. As well as creating a substantial increase in the number of Home Zones in England, the Challenge improved knowledge of what makes a good Home Zone. A good practice guide, Home Zones: Challenging the Future of Our Streets, was launched in November 2005. This publication has drawn together the lessons learnt from the Challenge schemes, complementing design guidance already available.

172. Guidance to local authorities on child road safety audits was issued in April 2003, clarifying the procedures they should cover when carrying out the audits. The Department is confident that most local authorities are now undertaking child road safety audits in a consistent format.

ACTION 15 - DfT will continue to monitor local authorities' performance of child road safety audits.

Children's play

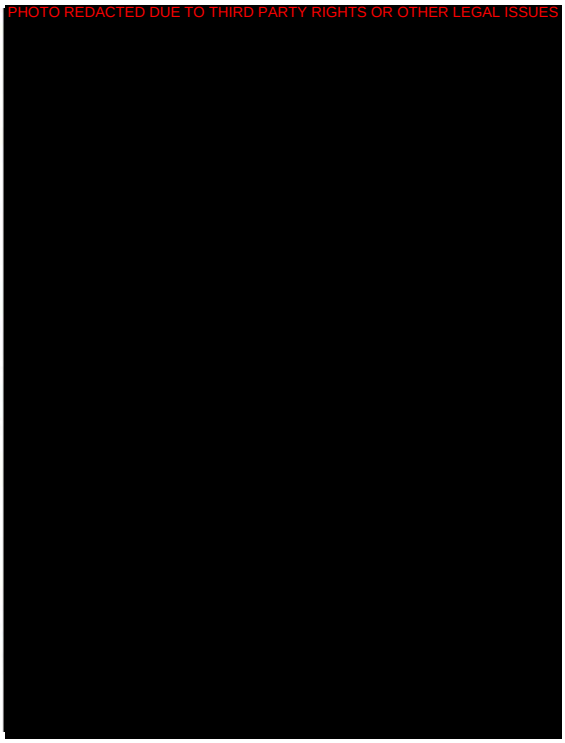
173. Children benefit from safe, accessible places where they can play out. NRSI has funded several play initiatives, including work relating to play facilities in Wigan, mentioned above. We have not scoped the issue of children playing in the road so we have no clear idea of how much it features in children's casualties. But the National Travel Survey now collects data on children's exposure as they play - including talking to friends, cycling, skateboarding and other activities.

Through its main programme in Stoke, NRSI funded significant improvements to play facilities in Burslem Park, Stoke on Trent, together with improvements to pedestrian routes to the park and through its Neighbourhood Focussed Project grant, NRSI central team funded improvements to Bradford Moor Park, Bradford.

Highway engineering

174. Significant road safety improvements can be gained through the design and engineering of road layouts. Some of these measures are specifically targeted at children, while many will benefit all road users, including children.

The Department is producing a new guidance document called Manual for Streets. It aims to provide a better balance of the needs of all road users in order to improve quality of life. The intention is that residential and other lightly trafficked streets would become more vibrant places where people will feel more inclined to stop and chat and children can play in safety. The Manual is expected to be published in spring 2007. It will supersede 'Design Bulletin 32' and its companion guide 'Places, Streets & Movement'.



The Local Transport Plan (LTP) system (and the equivalent in London) requires all English local highway authorities to consider road safety, including child safety, when planning and delivering improvements to local transport. This is highlighted in the guidance DfT issues to local authorities on their LTPs. The reporting processes require authorities to report on their success in achieving casualty reductions.

Cycling England has set up a free advice service for local authorities on improving the planning, design and implementation of cycle facilities. In addition DfT and Cycling England have produced a set of ten training modules to further improve the skills level of local authority staff providing for cyclists.

The Highways Agency's plans for maintaining and improving the trunk road network also take account of the need to deliver reductions in road accident casualties, including for children. The publication and use of documents to facilitate better crossing provision, in general, on the trunk road network is now in the Agency's Design Manual for Roads and Bridges. Delivery of the Agency's Vulnerable Users Crossing Programme is ongoing until 2007 subject to availability of funding. This programme helps improve crossings on the trunk road network where vulnerable users, such as children, have been identified as a particular problem. The Highways Agency is introducing new Area Safety Action Plans to help its area teams develop their road safety action.

175. Local highway authorities and the Highways Agency have already put in place many engineering measures, which have contributed to casualty reductions, but there is scope to do more. Possible engineering measures include:-

- Considering where engineering measures are needed to address particular road safety problems.
- Ensuring road safety is built into the design of all schemes for new roads and for road improvements
- Reviewing road environment planning processes to encourage a child-based approach to whole route safety
- Designing road environments to recognise children's capabilities and limitations.
- Designing local distributor and residential roads to provide a more forgiving environment where mistakes by child pedestrians are less likely to result in accidents and injuries

- Consulting the whole community, including children, adolescents and parents in traffic planning decision making. Innovative approaches include supervised web chats, focus groups and youth parliaments.
- In the development of new educational, health, shopping and leisure facilities likely to be used by children, considering safe access using all travel modes, especially cycling, walking and public transport.
- Reviewing the provision of pedestrian crossings - the number, position and type to ensure there is a good match to pedestrian route requirements and levels of usage. Also periodically reviewing the timings and correct operation of traffic signalled crossings.
- As further encouraged and supported by the Department's new guidance on setting local speed limits, local authorities should continue to consider the installation of 20mph speed limits and zones in areas where there is a particular risk to children. Traffic authorities are also further encouraged to consider the implementation of 30mph speed limits in rural villages.
- Area-wide traffic calming can also be used in 30 mph areas
- Greater provision of safe routes to local play areas as well as to schools.
- Engineering measures for rural areas with low cost and high benefit-cost ratios include: Channelisation markings on bends; Rib lines to slow drivers down; Vehicle-activated warning signs. But highway authorities should also take account of effects on other road users, for example rib lines and other painted road markings can make roads less safe for motorcyclists.

176. Good practice examples include:

- Sunderland City Council applied a high friction surface dressing to its district shopping centre - a mixed use Primary Route with a 30 mph speed limit - to help drivers stop more quickly in an emergency.
- To address a poor accident record and concerns expressed over the safety of school children, the City of York applied coloured road surfacing, along the arterial route towards the city centre, as part of a traffic calming scheme which also included cycle lanes.
- Oxfordshire County Council put flat top humps, 70mm height, in a residential road in Abingdon, to reduce speed and discourage through flow, in the hope of reducing child pedestrian accidents, possibly aggravated by parked vehicles and excessive speed.

ACTION 16 - Local authorities and the Highway Agency should include child road safety in all highways works. In particular, they should consider wider use of 20 mph zones in areas where children are active, traffic calming measures in these zones and other areas, and changes to residential street layouts to minimise through traffic.

Vehicle engineering and secondary safety features

177. A number of initiatives are under way or planned aimed at improving the safety of children when travelling in cars. New Regulations on child seat restraints came into force on 18 September 2006 and mean that children under 3 years must not travel in any car or goods vehicle unless they are using the correct baby or child car seat. Children aged 3 years or more, up to a height of 135 cms must use the correct child seat, booster seat or booster cushion, with very few specific exemptions. DfT issued publicity on the new child seat restraint Regulations from July to September 2006, to ensure parents and others were fully aware of the new rules.

RoSPA has produced, with Â£14,000 DfT funding, a leaflet **"Carrying Other People's Children Safely"** which is aimed at drivers who carry other people's children in their car, or in taxis, on buses, coaches or minibuses. This includes parents on the school run, for example, social workers, Surestart staff and others who carry children in their own cars on occasion.

ISOFix anchorage points are increasingly being installed in new cars. The main advantage is that they allow a child restraint to be secured safely to the main structure of the car, helping to minimise the risk of poor or incorrect seat installation. These permanent fixtures in each seat position mean that ISOFix compatible child restraints with ISOFix fittings will be able to be fitted and released very easily without needing to use the adult seat belts. It will take up to 10 years for the majority of cars to have them.

The **New Programme for the Assessment of Child Seats (NPACS)** has established test methods for the assessment of usability and dynamic crash performance (in both frontal and side impacts) for child restraint systems. NPACS was designed to obtain the scientifically based information needed to develop a single well founded assessment based on the latest car and child seat designs and the latest accident data. This information could be used to develop a well founded and effective consumer information programme. There have been several schemes for presenting such consumer information, each using their own test methods, assessment procedures and rating schemes leading to differing results and conflicting advice for the consumer. One of the objectives of NPACS is to provide independent published guidance to consumers on the relative performance of child seats.

Child Injury Led Design (CHILD) aims to increase the basic scientific knowledge of child biomechanics and use this information in applications of child restraint designs, testing and regulation. The project will deliver a better understanding of real world crashes and the associated injuries to children, through real world crash investigations (approximately 300 cases) and full-scale reconstruction. The work will evaluate the movements of children in different types of impacts for different ages of children and for different types of child restraint systems and also consider the consequences of interactions of restrained children with new systems designed for adults, such as pre-tensioners, frontal and side airbags. The project is being completed with a European consortium, with the research disseminated into other EU and national projects. Major steps can be made towards improved standards and more efficient design of child restraint systems as a result of this work.

178. Most motor vehicles currently in use on the road offer a high level of safety to the vehicle occupants, but the potential for more severe injuries to pedestrians remains of real concern to both Government and the vehicle industry. From 1 October 2005 new vehicle types have had to comply with the first phase of an EC Directive on pedestrian protection, which requires the fronts of vehicles to be tested with a view to reducing disabling leg injuries and fatal head injuries, particularly to children. Phase 2 of this Directive, which will further improve the levels of safety for pedestrians, is currently being reviewed for implementation in 2010. Tests for pedestrian protection have been a feature of EuroNCAP for a few years

and recently the first car, Citroen C6, achieved a 4-star rating which means that it is already likely to meet Phase 2 of the Directive. In addition, another EC Directive on frontal protection systems (i.e. bull-bars) comes into effect during 2006, prohibiting aggressive devices. It will be fully implemented in UK legislation by May 2007.

179. The Department has supported the attendance and participation of a UK expert in international working groups on pedestrian protection. The aim of these groups has been to reduce pedestrian casualties by developing and refining the international test methods for assessing the pedestrian protection performance of vehicles, for both child and adult pedestrians. This work has been feeding into the review of Phase 2 of the EC Directive and the development of a global technical regulation on pedestrian protection. Participation has enabled the UK views on this subject to be represented.

ACTION 17 - DfT is committed to continued involvement in on going European and harmonised World Wide initiatives to improve car design, including in-car design and restraints as well as pedestrian protection. We shall continue to monitor in-car design features such as airbags, seat strength and luggage retention devices through analysis of field investigations and accident studies to consider both the potential for injury and implications for future amendments to regulations.

180. The UK automotive sector is fully engaged in research and development into the latest vehicle safety design and technologies, both for children as passengers and pedestrians/cyclists. For example:-

Volvo has embarked on a number of initiatives to help reduce child casualties:

- Specific child safety options for new cars
- A new range of child seats
- Educational booklets
- Exhibiting at Baby Shows
- Direct mail focussed on young families
- The creation of a virtual pregnant crash test dummy.

BMW has a long established and ongoing commitment to support education across the UK. The BMW Education Programme provides comprehensive and award-winning educational resources. One of the programmes, Safe on the Street, provides road safety education for 7-11 year olds, their teachers and parents.

Renault commits 100 million euros per year and a staff of 600 to safety-related research and development. In addition to car design improvements Renault also manages 'Safety Matters', a road safety educational programme for children aged 7-11 their teachers and parents.

The SMMT 'Drive Green Drive Safely' leaflet should help to emphasise the importance of educating drivers how to use and maintain their vehicle in an appropriate way that takes full advantage of the safety measures that have been built-in.

181. Research has shown that wearing cycle helmets protects children from head and facial injuries if they are involved in an injury. The Department's view is that this should remain a matter for children and their parents or guardians to decide. Wearing rates are still relatively low. Cycle helmets were worn by 14% of children on major roads in built up areas in 2004, compared to 18% in 1994. We will therefore continue to take the approach of encouraging greater helmet use on a voluntary basis.

ACTION 18 - DfT monitors cycle helmet wearing rates, with a new survey taking place during 2006, with the results published in 2007. Our road safety publicity for teenagers and for younger children includes messages to encourage cycle helmet wearing.

182. Research to evaluate the suitability of adult restraints for children in minibuses and coaches ended in April 2006. Module 1 of the project investigated the suitability of adult seat belts for children in buses and coaches and proposed some potential countermeasures. Module 2 investigated and partially developed a potential method for non-destructive testing of low volume vehicle seat belt anchorages. The recommendations made in the final reports are being considered.

ACTION 19 - DfT is reviewing the suitability of adult restraints for children in minibuses and coaches in the light of the recommendation from this project.

183. Legislative changes came into force on 18 September 2006 making seat belt wearing compulsory for passengers aged 14 years and above in buses and coaches where seat belts are installed (seat belt wearing has been compulsory in minibuses since 1993). The Department will re-consult in order to consider arrangements for the responsibility for seat belt wearing by children 3 to 13 years in these vehicles. Normally a driver is responsible for children under 14 years but in these large vehicles, the driver cannot be expected to monitor seat belt wearing and also drive safely. Once that is decided, further Regulations will be brought forward to require seat belt wearing by children.

Legislation and enforcement

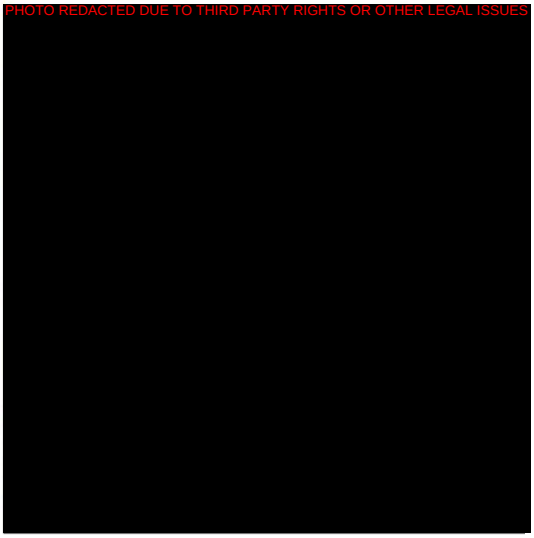
184. The Road Safety Act 2006, which completed its passage through Parliament in November 2006 will improve safety for all road users, including children. It includes measures to tackle:

- Speeding - including re-training courses for repeat offenders.
- Driver tiredness - including the creation of motorway rest areas.
- Drink-driving - including mandatory re-testing for serious and repeat offenders and the introduction of alcohol ignition interlocks.

185. The Act also increases some existing penalties - including making driving with a hand-held mobile phone an endorseable offence - and creates new offences of causing death by careless driving, causing death while driving illegally and keeping a vehicle that does not meet insurance requirements.

186. Cameras for speed enforcement are just one part of the Department's road safety strategy to make our roads safer for all road users. The National Safety Camera Programme has been successful: the report into the fourth year of the programme has shown: a 70% reduction in vehicles breaking the speed limits at

fixed sites; a 32% reduction in the number of children killed or seriously injured at camera sites; and a 22% fall in personal injury collisions over and above national trends, amounting to 4,230 fewer per year.



187. From April 2007/08, future funding will be integrated into the Local Transport Plan process when the level of funding for road safety to local authorities will be enhanced by Â£110 million per year (Â£440m over the period 2007/08 - 2010/11). This means that cameras are being integrated into the wider road safety delivery process and will give local road safety partnerships greater flexibility to implement the mix of road safety measures that will make the greatest contribution to reducing road casualties in their area. This can encompass a wide range of measures to address specific road safety problems including those to address child, pedestrian or cyclist casualties either by using cameras or other measures that will deliver results.

188. It would be useful to find ways to attract more school crossing patrol officers. Recruitment is difficult because of low wages and unusual hours. Only those appointed by a local authority and wearing the approved uniform have the legal power to stop traffic.

ACTION 20 - Local agencies should work together to ensure that speed limits are observed and crack down on local problems such as disregard of the law applying to School Crossing Patrols and other poor driving offences.

School journeys

189. Around one-sixth of all child casualties are recorded as taking place on a journey to or from school. Not all of these will occur near the school itself and many child pedestrian accidents happen close to home.

190. DfT, DfES and other agencies are working to reduce dependence on the car for school journeys. This includes encouraging more children to walk, cycle or take the bus to school. The focus of this work is mainly on reducing congestion and pollution and also to encourage children to develop a healthier lifestyle in line with Government policies to improve the health of our children, reduce obesity and encourage more physical activity. Road safety is also a key element. Developing safe routes to school is central to encouraging more walking and cycling.

191. DfT, through Cycling England and DfES, are funding programmes to encourage cycling and walking to school through initiatives such as Bike It and Links to School. DfT has also provided funds to Sustrans, to help build new links to schools. These routes, which are largely off road, are aimed at enabling more children to walk and cycle to school.

Links to School is a programme of links to extend the National Cycle Network to hundreds of schools in England. Central and local government have invested Â£31m in this programme to date. Bike It is a programme which brings together training, cycle parking and promotion has quadrupled cycling at the 40 participating schools who took part in the first pilot phase of the scheme. The scheme is now being extended into 5 more areas and is funded jointly by DfT (through Cycling England) and the bicycle industry.

The Making Choices teaching resource aimed at the transition between primary and secondary school and Get Across Road Safety for parents of 7-10 year olds both encourage families to walk their child's route to school.

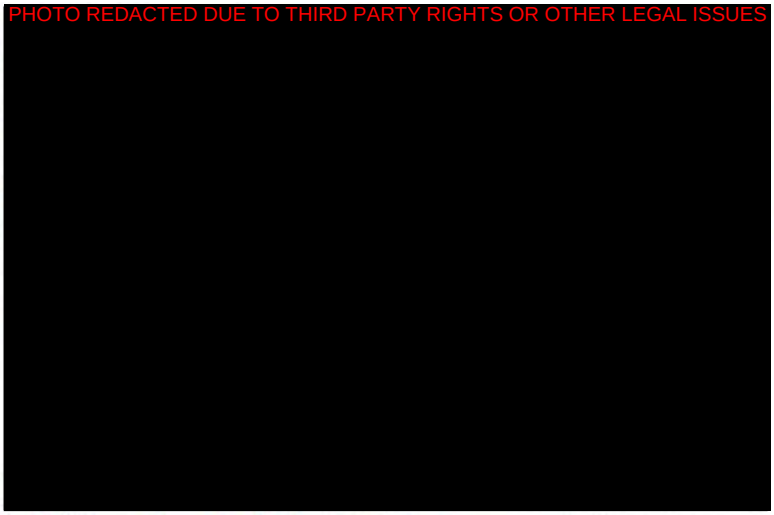
Walking Buses

192. In November 2006 DfT launched a new scheme to encourage more primary school children to walk to school. DfT has pledged Â£15 million over the three years April 2007 to March 2010 to support the scheme, part of the joint Travelling to School project. State-funded primary schools in England can apply for grants of Â£1,000 a year for three years to help them to set up a new walking bus. Walking buses benefit everyone and are popular with schools, parents and children alike

- improving children's health and their preparedness to learn when they arrive at school;
- reducing traffic, congestion and air pollution around schools and also helping to combat climate change;
- providing an opportunity for children to improve their road safety skills and learn about their surroundings; and
- letting children spend time with their friends and being able to enjoy the journey to school together.

193. DfT realises that walking buses may not be the right solution for every school, so smaller grants of Â£500 a year are available to schools that would prefer to implement an alternative walking initiative such as *Walk on Wednesday* or *Go for Gold*.

194. In return for the grants DfT is asking schools to save a certain number of car trips. If schools are applying for Â£1,000 a year to set up a walking bus, headteachers are asked to have a reasonable expectation of saving five return car trips per day on average. If they are applying for Â£500 for an alternative walking initiative, headteachers are asked to have a reasonable expectation of saving 2.5 five return car trips per day on average. Funding in years two and three will depend on evidence of these car trips having been saved and the headteacher's reasonable expectation that this will continue.



195. Schools can undertake various measures to improve the safety of children on the school journey, including:-

- Developing and implementing risk management policies for journeys to and from school as part of School Travel Plans (STP).
- Including travel to school in the school inspection process. School Inspectors can make reference to STPs in their reports.
- Providing secure storage for pupils' cycle helmets, to help alter the view that helmets are inconvenient. This will help encourage children cycling to school to wear helmets. Facilities such as storage lockers are a possible component of school travel plans.
- School staff should consider road safety issues when pupils are taken outside the school - in vehicles and as pedestrians.

ACTION 21 - From 2007 Local Authorities must consider the travel needs of all pupils and promote sustainable travel to school. All schools must have a robust School Travel Plan by 2010, which could include identification of road safety concerns and remedial action.

7. Scotland and Wales

Scotland

196. The number of children killed or injured on Scottish roads has fallen significantly since the 2010 casualty reduction targets were set and in 2005 child deaths and serious casualties were 56% below the 1994-98 baseline.

197. The Scottish Executive works in partnership with local authorities, the police and other key organisations to improve road safety for children. Through Road Safety Scotland (RSS), the organisation which represents road safety interests throughout Scotland, the Executive develops educational initiatives and publicity messages. RSS's Strategy for Road Safety Education aims to ensure that a core of road safety is taught to all children throughout Scotland, linking to national education guidelines. The strategy covers all stages of a child's formal education, from pre-school to secondary, and includes special educational needs.

198. Pedestrians are the largest group of child casualties in Scotland, and nearly one third of those were injured on journeys to or from school. The Scottish Executive provides resources for initiatives aimed at improving child pedestrian safety. In particular, local authorities are receiving dedicated additional resources for initiatives focussing on the school journey. This includes funding, totalling nearly Â£50 million between 2003 and 2008, for 20 mph speed limits around schools, Safer Routes to School projects and the development of Home Zones. The Executive also funds School Travel Coordinators in local authorities: these resources are assured until 2008.

199. The Executive believes that a 20 mph speed limit in the vicinity of schools will improve safety for children walking or cycling. By mid 2006, with Executive funding, 20 mph speed limits were in place at two-thirds of schools in Scotland.

Road Safety Scotland

200. Road Safety Scotland is implementing a strategy for road safety education in the Scottish curriculum and has developed a range of road safety education resources, in addition to work on other initiatives aimed at improving children's road safety. RSS brings together the key interests to ensure a coordinated approach to road safety in Scotland. A Business Plan is produced annually. The Executive will continue to fund the work of RSS.

201. Research is an essential tool in the development and evaluation of education and publicity initiatives. RSS initiatives are fully researched and evaluated, to ensure that they are effective.

202. The 'Streetsense' resource for primary schools has been reviewed and the recommendations are being taken forward in a new 'companion edition'. This will enhance the resource already in schools, providing more copies to classroom teachers and delivering the material in more easily accessible format.

203. Theatre in Education is an effective way of raising awareness of road safety issues with different audiences. A new play has been developed for pupils in S5 and S6. 'Friends Disunited' aims to encourage responsible driving behaviour.

204. Following research into Road Safety Education for children and young people with additional learning needs, a new website resource is being developed for young people with mild to moderate learning needs from teenagers to twenties. 'A2B', which is interactive and offers feedback to support staff in school and for family at home, will enable a young person to navigate, as a pedestrian, through different routes.

Junior Road Safety Officer Scheme

Road Safety Scotland is continuing to develop the Junior Road Safety Officer scheme. A range of activities is being undertaken to stimulate motivation and to recognise the important role of JRSOs and reward their hard work and commitment to road safety. These include the provision of prizes for competitions run by JRSOs in schools, special JRSO clocks for every JRSO at the start of the school year and the award of certificates at the end of the year. The website is a key element of the scheme. Planned improvements include:

- a password protected media desk/section for RSOs
- separate feedback sections/discussion forums for JRSOs and RSOs to encourage the sharing of experiences and ideas
- a school travel section incorporating environmental and health and safety issues.

205. A resource for adult literacy groups, aimed at young and new drivers, was launched in March 2006. The development of a second resource, for parents of young children is now in progress.

206. Young drivers are over represented in road accidents and research has shown that attitudes to driving and driver behaviour are formed long before young people get behind the wheel. Road Safety Scotland's 'Crash Magnets' resource, developed for pupils in S3 to S6, was launched in February 2006.

Crash Magnets

'Crash Magnets' acknowledges the attractions and benefits of driving, while encouraging young people to become responsible road users and drivers. Linking to the Scottish curriculum, a DVD with 5 programmes covers topics including peer influence, distraction, the cruise culture, speed, drink and drug driving and the law. The DVD informs discussion and stimulates debate exploring current trends and recent events in an up-beat way. Additional teaching materials, stretching to 10 lessons, are available from the 'Crash Magnets' toolbox. A website is also being developed.

207. Road Safety Scotland is a key partner, along with local authorities, police and private enterprise in an initiative to improve the safety of child car passengers. As part of an annual campaign, child seat clinics provide advice on the legal requirements and check the fitment of child car restraints. The clinics are supported by a booklet (the Good Egg Guide), a Retailers' Charter and the http://www.protectchild.co.uk website.

National Transport Strategy

208. The Executive's National Transport Strategy, published in November 2006, highlights groups at which further measures could be targeted, such as children from disadvantaged areas and those for whom English is not their first language.

Kerbcraft

209. As in other parts of Great Britain, pilot child pedestrian training schemes for 5 and 6 year old children, using the Kerbcraft resource, have been carried out in 12 local authorities in Scotland with Executive funding. In selecting schemes for inclusion in the trials priority was given to schemes in disadvantaged areas. The Executive will consider further support for these schemes in the light of an evaluation of the trials.

Children's' Traffic Club in Scotland

210. Early training provides a vital base on which road safety education in later years can build. The Children's Traffic Club in Scotland, which offers free road safety training to all 3 year old children, passed its tenth anniversary in November 2005. Road Safety Scotland is aiming to increase Club membership in areas of high social deprivation and will take forward the recommendations of research on this issue.

Scottish Cycle Training Scheme

211. The training resource for the Scottish Cycle Training Scheme is being revised following an evaluation of the scheme. RSS is working with Cycling Scotland on the development of a national standard for child cycle training and for Continuous Personal Development for road safety officers.

Child Safety Action Plan

212. A Child Safety Action Plan for Scotland, covering all forms of accidental injury, is being developed as part of a European Child Safety Alliance initiative. RoSPA and CAPT are working in partnership to lead this initiative in Scotland.

Wales

213. The number of children killed or seriously injured on Welsh roads has fallen significantly since the 2010 casualty reduction targets were set in 2000 and in 2005 child fatalities and serious casualties were 53% below the 1994-98 baseline.

214. In 2003 the Welsh Assembly Government published a Road Safety Strategy and they are continuing to implement the specific actions outlined in the strategy aimed to improve child road safety in Wales.

215. Child road safety policies in Wales are largely delivered by local authorities and other organisations using financial support from the Assembly Government. In particular local authorities are using their road safety grant to fund specific projects such as the Junior Road Safety Officers Scheme, the Childrens' Traffic Club and Theatre in Education.

216. In addition local authorities are receiving dedicated additional resources for initiatives focussing on the school journey. Since 2000 the Assembly Government has allocated over Â£22 million to safe routes to school schemes across Wales. Every local authority has received funding and over 350 schools now have safe routes in place.

217. The Assembly Government also funds a Kerbcraft co-ordinator in each of the 22 local authority areas. In the 2005-06 school year Kerbcraft training had been undertaken in 225 schools; 8102 children had received training and 891 volunteers were involved in training children.