



National Audit Office

DEPARTMENT FOR TRANSPORT

Improving road safety for pedestrians and cyclists in Great Britain

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL | HC 437 Session 2008-2009 | 8 May 2009

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and cyclists in Great Britain

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SUMMARY

Background

1 In 2007, 2,946 people were killed on Great Britain's roads, which is 18 per cent less than the average number of deaths between 1994 and 1998. Travelling by road is still one of the riskiest daily activities, however, and it accounts for nearly 97 per cent of all transport fatalities. Pedestrians and cyclists are among the most vulnerable road users, having little or no physical protection and with a higher rate of fatality per distance travelled than for any other mode of transport except for motorcyclists.

2 The Department for Transport (the Department) has several initiatives to reduce congestion, improve local environments, and encourage healthier and safer

lifestyles, which entail, among other things, encouraging more people to walk and cycle. Over the last 30 years the average distance people walk each year has fallen by 19 per cent, while the distance people cycle annually has declined by 24 per cent; and although in the last decade these distances have stabilised, they have shown no evidence of recovering to past higher levels. Nearly one quarter of all trips are one mile or less, and over 40 per cent are within two miles and so potentially suitable distances for either activity. Improving the actual and perceived safety of walking and cycling will help to increase the uptake of these activities. Improving child safety on the roads is also a key strand of the Government's Public Service Agreement to improve the safety of children and young people, who are more dependent than adults on walking and cycling.

3 The Department's Road User Safety Division leads the promotion of road safety and had a budget of £36 million in 2008-09 for its road safety activities. Local highway authorities are responsible for most of the expenditure on road safety schemes, over £135 million in 2005-06. The Department must therefore work with local highway authorities and other organisations to improve the safety of pedestrians and cyclists and indeed other road users. The Department leads strategy and research; funds innovative schemes and disseminates lessons so that local highway authorities know what improves road safety; and develops and manages the *Think!* national road safety publicity campaign. It is also responsible for the legislative framework.

4 In this Report, we examine whether the Road User Safety Division is improving safety among pedestrians and cyclists. We examine specifically whether it has an effective strategy and programme of activities for these groups and whether it works well with other organisations.

Key Findings

Trends in deaths and serious injuries among pedestrians and cyclists

5 Against the average number of deaths and serious injuries for the years 1994 to 1998, the Department's current strategy is to reduce by 2010 the number of people killed and seriously injured by 40 per cent; the number of children killed and seriously injured by 50 per cent; and the rate of slight injuries per 100 million vehicle kilometres by 10 per cent. The Department is on track to meet these targets with reductions to 2007 of 36 per cent, 55 per cent and 32 per cent in each respective category. The Department is now formulating its strategy for the period after 2010.

6 The underlying picture is complex.

- There is a slower rate of fall in the number of fatalities (18 per cent) than that for the seriously injured (37 per cent) compared with the average number between 1994 and 1998.
- There are different trends within particular groups. Overall, deaths and serious injuries fell 11 per cent from 2004 to 2007, while for cyclists they rose by 11 per cent from 2004 to 2007, despite the amount of cycling staying broadly constant.

The Department publishes disaggregated data, which make clear the underlying trends on a quarterly basis.

7 Research by both the Department and others indicates that serious injuries are under-recorded, with less severe serious injuries more likely to be classified as slight by the police. The Department uses data collected by the police, but not all road accidents are reported or recorded and it cannot be sure whether the under-reporting of casualties has changed over time. Our own analysis suggests that the numbers of seriously injured casualties may be under-recorded by as much as two-fifths for pedestrians and one-fifth for cyclists. The Department is taking steps to match hospital data with the police data to improve its understanding of under-reporting.

8 In 2007, the Department reported a reduction of 41 per cent in the number of pedestrians killed or seriously injured and of 31 per cent among cyclists compared to the average between 1994 and 1998. This decline is attributable to improved safety levels rather than to a decline in walking and cycling, as in the last 10 years the amount of walking has remained constant at about 200 miles per person per year and cycling has declined slightly from 43 to 39 miles per person per year. The Department produces regular and extensive analyses across all road user groups including pedestrians and cyclists and has a good understanding of which pedestrians and cyclists are most at risk and the factors that increase the severity of casualties. It is more difficult to identify the factors which lead to accidents as they are complex and varied.

- Pedestrians over the age of 70 account for a disproportionate share of deaths, while children under the age of 15 account for less than would be expected given their share of the population and the amount of time they spend travelling on foot.
- Child pedestrians are most at risk from 3pm until 7pm, especially during the weeks after the end of British Summer Time.
- Cyclists are more likely to be killed in collisions with lorries.
- Pedestrians are at high risk when they do not pay sufficient attention to the roads.
- There is a disproportionately high level of pedestrian and cyclist casualties in deprived areas.
- Collisions with vehicles travelling at more than 20 miles per hour increase the severity of pedestrian and cyclist casualties.

The road safety strategy

9 The Department's road safety strategy includes work and activities to address the particular risks to pedestrians and cyclists outlined above. These include publicity aimed at changing their behaviour as well as encouraging other measures which have an impact on the safety of pedestrians and cyclists. The strategy does not contain specific targets, however, for reducing casualties among pedestrians and cyclists or any particular group of road users other than children. Unlike some countries, it also does not include activities to minimise the severity of casualties once an accident has occurred. For example, Australia's road safety strategy promotes activities to improve the medical care of casualties of road accidents. The Department is liaising with the Department of Health in formulating its new road safety strategy, but the extent to which it will use health measures is currently unclear. The Department began public consultation on its new strategy in April 2009.

The effectiveness of activities to improve the safety of pedestrians and cyclists

10 The Department needs to encourage and help local highway authorities to invest in the most effective road safety measures. For example, the Department's research has shown that 20 miles per hour zones enforced by measures such as road humps can reduce accidents involving pedestrians by 63 per cent and cyclists by 29 per cent. It can take local highway authorities a long time to secure agreement from local interest groups and to implement such changes to roads. The Department does not monitor the adoption of such measures.

11 It is difficult to assess the effectiveness of education, training and publicity initiatives. The Department funds some innovative projects, some of which include educational programmes, which offer an opportunity to assess their effectiveness in a more controlled environment. This opportunity may however be lost, as local highway authorities felt that they did not have the necessary expertise to evaluate their success, and the standard of evaluation plans varied in the projects that we examined.

On working with other organisations

12 The Department has to work with many organisations, and generally it has a good working relationship with them. The Department depends on its policy and technical advisory roles to build relationships with those who influence and deliver road safety. Its approach to date has been informal and based on staff's personal contacts built up over time. The Department also needs to be more innovative in the dissemination of lessons and information, for example, by targeting specific information at those who are most likely to use it.

Conclusion on value for money

13 Encouraging people to walk and cycle more by making these activities safer will help with the introduction of measures to reduce congestion, improve the environment and encourage healthier lifestyles. Deaths among both pedestrians and cyclists have fallen since the mid-1990s, but more remains to be done to improve their safety: deaths among pedestrians have fallen by 36 per cent, but Great Britain is some way behind some of the better performing nations; cyclists' deaths have fallen by 27 per cent, but deaths and serious injuries among this group have risen by 11 per cent since 2004.

14 The Department had a programme budget of £36 million to cover its road safety activities in 2008-09. This funding is not directed to specific road users and many other bodies contribute to road safety, so it is difficult to determine the effectiveness of the Department's specific contribution. The Department has, however, taken a number of relevant measures.

- It has provided a general strategy for road safety, which includes a programme of activities based on firm evidence that address the issues that affect pedestrians and cyclists. The strategy has also provided a focus for other organisations working in this field, with whom the Department generally works well.
- It has developed media campaigns through its *Think!* campaign to change the beliefs and attitudes of road users, including pedestrians and cyclists. While the Department evaluates these changes it is not possible to connect them directly to reductions in road casualties.
- Through its research programme, it has developed a good understanding of which pedestrians and cyclists are most at risk and where and when accidents occur, and provided evidence of the effectiveness of engineering solutions in reducing the incidence and severity of casualties.
- By funding innovative road safety projects, it is helping to generate useful lessons for local highway authorities on implementing infrastructure and education measures, but evaluation of the lessons in some areas could be better.

Recommendations

On measuring road safety amongst pedestrians and cyclists

15 The Department's current targets for road safety do not distinguish between different trends in deaths compared to serious injuries, or among particular groups. To increase transparency, the Department should set targets that report separately the numbers of people killed and those seriously injured, and further subdivide these between different groups of road users.

16 Some types of serious injuries are under-recorded. While it is difficult to measure serious injuries accurately, there are a number of other sources of data on road casualties which can improve the Department's understanding of the robustness of its data and enrich its understanding of safety on Great Britain's roads.

The Department should:

- complete by Autumn 2009, when it publishes the new strategy, its work on assessing the usefulness of Hospital Episodes Statistics (hospital admissions) data and how it might complement the police data; and
- assess whether and how it can use other data, such as that collected by the Department for Work and Pensions on motor collision injury compensation claims, to improve the reporting of trends in road safety.

On encouraging implementation of measures to reduce casualties among pedestrians and cyclists

17 Research has shown that some measures are effective in reducing the incidence and severity of casualties among pedestrians and cyclists. For example, 20 miles per hour zones in urban areas that are enforced by physical measures such as road humps can reduce accidents involving pedestrians by 63 per cent and cyclists by 29 per cent.

- The Department should more systematically identify local highway authorities that have introduced effective measures such as 20 miles per hour zones successfully, and share the lessons with other local highway authorities, including how best to secure agreement locally to such changes and to implement them.

On maximising the Department's investment in innovative road safety projects

18 Physical changes to make roads safer can take a long time because many groups need to agree to changes on road layouts, or equipment and services need to be procured. Valuable lessons on how to manage these issues could be learnt from the Department's funding of innovative projects, but some local highway authorities find it difficult to complete them within the Department's timescales.

- The Department should allow a lead time before projects commence so that local highway authorities can undertake sufficient consultations or procure specialist staff or equipment prior to the core project start, in return for guarantees that authorities will spend the money in the year in which the Department has budgeted for it.

19 Without robust evaluations of these projects the Department cannot establish the value for money achieved from its investment in them, and there is a risk that it will not be able to identify or disseminate wider lessons.

- As a condition of its funding of partnership and demonstration projects, the Department should require local highway authorities to adhere to prescribed evaluation standards.
- The Department should fund fewer, larger projects to allow it to fund more robust evaluations.

On working with other organisations

20 The Department relies on other organisations such as local highway authorities to improve safety for pedestrians, cyclists and other road users, but does not have an explicit strategy for working with them.

- The Department needs to develop an explicit strategy which:
 - identifies which groups will contribute to the delivery of improvements to pedestrians and cyclists and how they will do so;
 - identifies key contacts in each relevant body and communicates regularly and formally with them; and
 - develops key indicators to assess how well it works with other bodies, such as whether shared objectives with those bodies have been achieved.

21 The Department disseminates too much information that is insufficiently focused, and local highway authorities and other groups interested in road safety would find more interactive dissemination events more useful.

- The Department should gear its communications more actively towards specific target audiences, providing:
 - more detailed and technical information to those working in the road safety arena and provide them with opportunities to share and discuss this information alongside their own experiences and particular challenges; and
 - more easily digestible information set in a practical context for others such as road safety charities; for example about risks to pedestrians and cyclists when clocks change in the autumn and by making cyclists and drivers of heavy goods vehicles more aware of the specific risks posed by lorries.



PART ONE

Road safety among pedestrians and cyclists in Great Britain

1.1 In this Part we examine: trends in road safety among pedestrians and cyclists; problems with measuring road safety performance; and the roles and responsibilities of the Department for Transport (the Department) and others in this area.

Scope of our examination

1.2 The number of deaths recorded by the Department on Great Britain's roads is falling. In 2007, 2,946 people died compared with the average of 3,578 in the five years to 1998,¹ a decline of 18 per cent, while road traffic increased by 16 per cent. Travelling by road is still one of the riskiest daily activities, accounting for over one-quarter of all accidental deaths in Great Britain in 2006, and for nearly 97 per cent of transport fatalities. Pedestrians and cyclists are more vulnerable having little or no physical protection, and with a higher fatality rate per distance travelled than for any other mode of transport except motorcyclists (**Figure 1**). In 2007, over 30,000 pedestrians and 16,000 cyclists were injured, with 646 pedestrians and 136 cyclists killed. We estimate that casualties for these two groups cost the economy over £3.4 billion,² as well as the inevitable distress and health problems for victims and their families.

1.3 Real or perceived safety risks also impact on the Department's efforts to reduce congestion, improve local environments and encourage healthier and safer lifestyles, which depend in part on more people walking and cycling. Between 1976 and 2006, the distance people walked declined from 248 to 201 miles per person per year, and cycling fell from 51 to 39 miles per person per year, while the average distance travelled by car over the same period increased from 3,200 to 5,700 miles per person per year. The Department is committed to reversing the decline. For example, it is providing £140 million to

fund cycling projects up to March 2011, but recognises that increased cycling could lead to more accidents. Making walking and cycling safer is key to increasing their uptake, and organisations we interviewed also highlighted the importance of improving the perception of the safety of walking and cycling.

1 Fatality rates¹ by mode of transport, Great Britain, 1997-2006

Mode	Fatalities per 100 million passenger kilometres, average 1997-2006 ²
Air ³	0.000
Water ⁴	0.024
Bus or coach	0.029
Rail ⁵	0.032
Van ⁶	0.086
Car ⁶	0.269
Pedal cycle	3.404
Pedestrian	4.421
Motorcycle ⁶	11.144

Source: Department for Transport data

NOTES

- 1 The death rate among cyclists and pedestrians reflects greater exposure in terms of length of time on the road.
- 2 Financial years up to 1999. From 2000 figures are on calendar year basis.
- 3 Passenger deaths in accidents involving UK registered airline aircraft in UK and foreign airspace.
- 4 Passenger deaths on UK registered merchant vessels.
- 5 Passenger deaths in train accidents and accidents occurring through movement of railway vehicles.
- 6 Driver/rider and passenger deaths.

¹ The Department measures its progress against the average of the five years from 1994 to 1998.

² This figure is based on the Department's estimates of the values of the prevention of road accidents contained in Highways Economic Note 1. See Appendix 1 for further information.

1.4 The Department's Road User Safety Division (the Division) leads the promotion of road safety. In this Report we examine whether it is effective in improving safety among pedestrians and cyclists. We examine specifically whether the Division has in place an effective strategy and programme of activities, and whether it is working effectively with other organisations.

Casualties among pedestrians and cyclists

Progress towards targets for reducing deaths and serious injuries

1.5 The Department has targets to reduce by 2010 the numbers of people killed or seriously injured by 40 per cent, of children aged 0 to 15 by 50 per cent and slight injury rates per 100 million vehicle kilometres by 10 per cent compared with the average between 1994 and 1998. As shown in **Figure 2**, the Department is on track to achieve these targets. Within these totals, the numbers of people killed and seriously injured has fallen by 41 per cent among pedestrians and by 31 per cent among cyclists (**Figure 3**). The overall decline in casualties among these groups in this period is attributable to improved safety levels rather than to a decline in walking and cycling, as over the last 10 years the amount of walking has remained broadly constant at 200 miles per person per year, while cycling has declined slightly from 43 to 39 miles per person per year. The Department's annual casualty reports contain more detailed analyses of trends in road safety among specific road user groups and by severity of injury, which show the complexity of the underlying position.

1.6 The Department's targets combine deaths and serious injuries in a single measure. As the number of serious injuries is around 10 times greater than the number of deaths, trends in serious injuries will mask those of deaths. This is more of a problem for the overall figures for all groups of road users than for the figures for pedestrians and cyclists. Figure 2 shows that the overall fall of 18 per cent in the number of deaths compared with the average number between 1994 and 1998 is much less than that for serious injuries, which have fallen by 37 per cent. Both have fallen, however, at about the same rate since 2003. Serious injuries and deaths have fallen by 41 per cent for pedestrians and 31 per cent for cyclists over the last decade; the figures for deaths alone have fallen for pedestrians by 36 per cent and for cyclists by 27 per cent.

1.7 Overall performance data can also mask trends within particular groups of road users. For example, the numbers of cyclists killed or seriously injured also fell from 2000 to 2004, but this trend was reversed with a rise of 11 per cent from 2004 to 2007 (Figure 3) or 15 per cent per 100 million kilometres travelled (**Figure 4**), despite the amount of cycling staying broadly constant. The 2007 rate of death or serious injury per kilometre travelled for cyclists is higher than it was in 2000, and 27 per cent higher than its historic low of 2.5 deaths per 100 million vehicle kilometres in 2003. The Department commissioned research into road user safety and cycling in 2008-09 and is due to report in 2010-11.

2 Progress against road safety targets

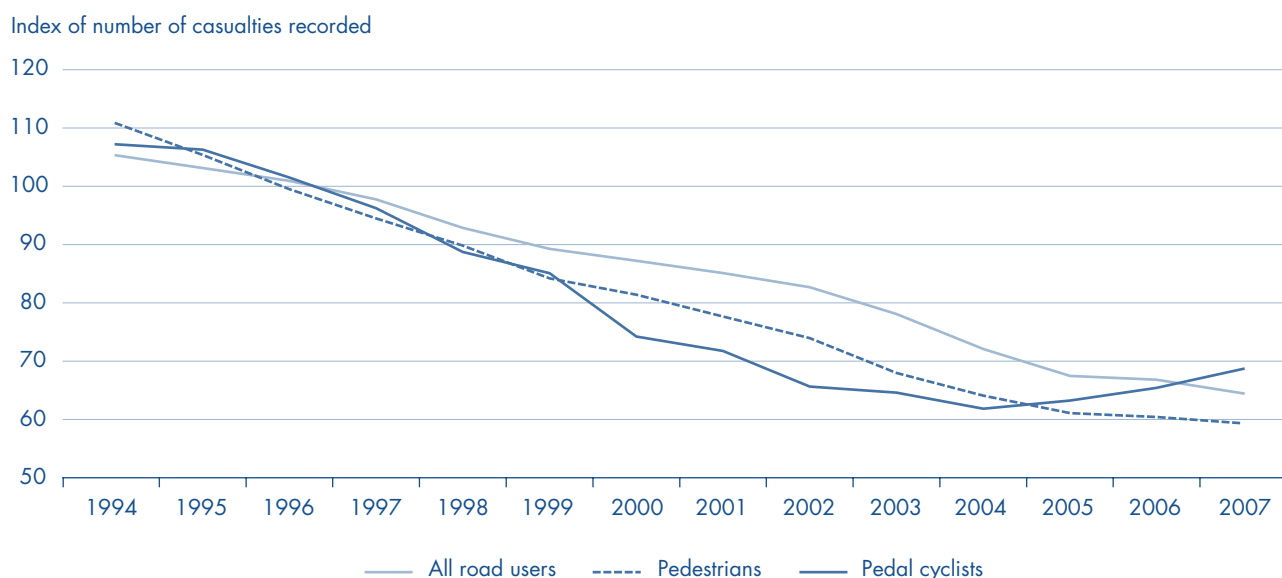
		Target for 2010 report	Actual for 2006 report	Actual for 2007 report
Percentage reduction in the number of people killed or seriously injured	Killed	–	11	18
	Seriously injured	–	35	37
	Killed or seriously injured	40	33	36
Percentage reduction in the number of children (aged 0-15) killed or seriously injured	Killed	–	35	53
	Seriously injured	–	53	55
	Killed or seriously injured	50	52	55
Percentage reduction in the slight casualty rate (the number of people slightly injured per unit distance travelled)		10	28	32

Source: Department for Transport data

NOTE

The Department measures the progress against the average of the five years from 1994 to 1998.

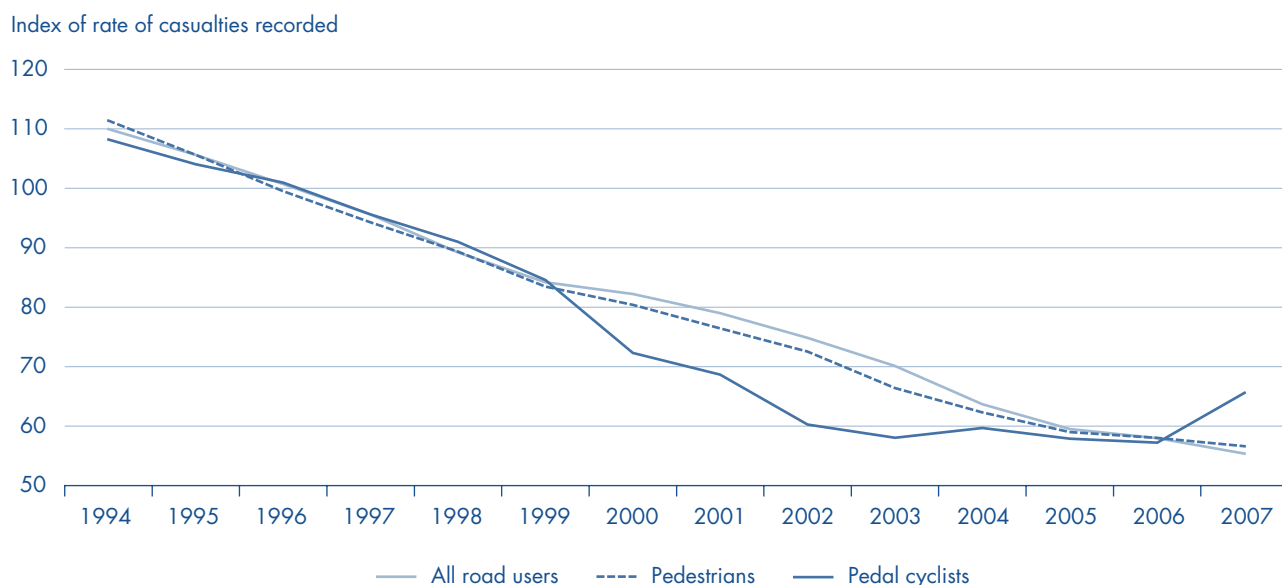
3 Index¹ of recorded deaths and serious injuries from road travel in Great Britain by road user type, 1994-2007, as measured by absolute numbers



NOTE

1 One hundred on the chart is equal to the average for the five calendar years 1994 to 1998. The Department measures its progress against this period.

4 Index¹ of rate² of recorded deaths and serious injuries from road travel in Great Britain by road user type, 1994-2007, as measured by population and distance travelled



NOTES

1 100 on the chart is equal to the average for the five calendar years 1994 to 1998. The Department measures its progress against this period.

2 For all road users, the rate is per 100 million vehicle kilometres of all traffic. For pedal cyclists, the rate is per 100 million vehicle kilometres of cycle traffic only. For pedestrians the mid-year populations have been used.

1.8 International comparisons also give some cause for concern on pedestrian and child pedestrian deaths. While Great Britain was fifth overall internationally for the least number of road deaths per head of population, it is only eleventh highest out of 24 Organisation for Economic Cooperation and Development nations (for which data was available in 2006) for pedestrian deaths. For child pedestrian deaths it ranks seventeenth, some way behind the best (Appendix 3). The United Kingdom was fourth highest out of 14 European nations in 2006 for the least number of cyclist deaths per head of population.

Data on serious injuries

1.9 The Department uses data collected by the police, but it has recognised for many years that, in common with road safety data collection systems across Europe, not all road traffic collisions are reported to the police and that they do not record all of those reported. The Department has commissioned a number of research projects since the 1970s to improve its understanding of under-reporting, the most recent large-scale investigation being in 1996. Estimates vary, but some research suggests that the total number of serious and slight casualties may be about twice the number reported. Under-recording may be greater among some road users.³ We found that at least two-fifths of all pedestrian and one-fifth of all cyclist serious injuries in the hospital database are not recorded in the Department's database (Appendix 2). Motor collision compensation claims data and the Department's annual National Travel Survey also suggest that injuries overall may be understated. Under-recording is not unique to Great Britain. The European Road Safety Observatory has estimated that, in total across the European Union, under-reporting of hospitalised casualties varies between 30 and 60 per cent.

1.10 The likelihood of an injury being reported is also related to its seriousness. As severity of injury increases, the more likely it is that the accident will be reported to the police and very few fatalities are not accounted for. The definition of "serious" casualties in the police data is wide, however, and includes all casualties admitted to hospital, all fractures, however minor, and other injuries such as severe cuts whether or not requiring hospital admissions. Research has also shown that the police tend to underestimate the severity of injuries, with the less severe serious injuries more likely to be classified as "slight" than the more severe serious injuries.

1.11 These research projects have helped to improve the Department's understanding of levels and characteristics of under-reporting at a point in time, though the Department accepts that it cannot demonstrate definitively that trends in under-reporting have not changed over time. While police records remain the most reliable source of data for trend analysis, other sources of data on road casualties, such as those outlined in Appendix 2, could help the Department to check the robustness of its data and help to identify any trends in under-reporting.

1.12 The Department has examined hospital data on pedestrian and cyclist injuries in its two most recent annual casualty reports, and it is taking steps towards matching the police data with hospital data on a routine basis. Each data set has its own limitations. Since it was introduced in 1989 the way the hospital admissions data has been collected has changed, and has shown an increase in all admissions from Accident and Emergency, not just road casualties, and so using it to measure trends has been problematic in the past. It should, however, be less difficult in future as the data is reaching a steady state. The Department plans to undertake further work to reconcile the different sources of available data.

Analysis of pedestrian and cyclist casualties

1.13 We found that the Department's research has given it a good understanding of which pedestrians and cyclists are most at risk and where and when accidents to pedestrians and cyclists occur. It publishes the results in the annual casualty report and often produces articles and fact sheets about pedestrians or cyclists.

Ages of pedestrian and cyclist deaths

1.14 Of the 646 pedestrians killed in 2007, 57 (nine per cent) were aged from 0 to 15 years old, 362 (56 per cent) 16 to 69 years and 223 (35 per cent) over the age of 70.⁴ These figures are representative of the spread of pedestrian casualties since 2000. Pedestrians aged over 70 accounted for a disproportionate share of deaths given their share of the population (at 12 per cent). Conversely, children up to 15 years of age account for a lower share of pedestrian deaths than would be expected given that they account for 19 per cent of the population and spend more time travelling on foot than other age groups.⁵ In 2007, child pedestrian deaths were 23 per cent lower than in 2003, and seven per cent more than the equivalent adult rate.

³ See, for example, *Comparison of hospital and police casualty data: a national study*, TRL Report 173, 1996.

⁴ There were four pedestrian fatalities in 2007 where the police data did not record the age of the pedestrian.

⁵ 2007 National Travel Survey.

This improvement may be explained in part by National Travel Survey data, which reports that four per cent more 7 to 13 year olds were accompanied to school and four per cent fewer were at least sometimes allowed to cross roads unaccompanied by adults.

1.15 In 2007, 136 cyclists were killed compared to 186, the average number of deaths between 1994 and 1998. Thirteen were aged 0 to 15 years old, 98 were 16 to 59 years old and 24 were over 60, with one whose age was not recorded. The number of cyclists killed fluctuates each year. The average number of deaths for 1994-98 was 42 for child cyclists aged 0 to 15 years old, 104 for cyclists aged 16 to 59 years old and 40 for cyclists over 60 years old.

Where pedestrian and cyclist casualties occur

1.16 Most pedestrians and cyclists are killed on roads with speed limits of less than 40 miles per hour. Pedestrians are over five times more likely to be killed or seriously injured on urban than on rural roads. In 2007, there were over one-third more cyclist casualties per 100 million vehicle kilometres on urban roads than rural roads, but cyclists sustain more severe injuries on rural roads, with three times the risk of death.

1.17 **Figure 5 overleaf** shows the recorded rate of deaths and serious injuries among pedestrians and cyclists in the different regions of Great Britain. There is no definitive explanation for regional differences. The factors which are likely to influence different levels of performance include the mix of urban and rural areas and of road types and the levels of walking and cycling which are linked to levels of car ownership and topography.

Deprivation and road casualties

1.18 People who live in deprived areas are more likely to be injured on the roads, both within and outside their community, partly because they tend to walk more than those who live in less deprived areas. In 2002, the Government set a three-year target to reduce casualties in deprived areas in England faster than the rest of the country, which it met. However, the most deprived areas were still over-represented in the casualty population in 2007, and pedestrians and cyclists were very over-represented. For example, pedestrians aged 0 to 16 in the most deprived areas are four times more likely to be killed or injured than those in the least deprived areas (**Figure 6 on page 15**).

1.19 The number of cyclist casualties in urban areas stays broadly the same irrespective of deprivation, but in rural areas the rate is over four and a half times greater for the most deprived areas than the least deprived areas, and is nearly four times greater than in the most deprived urban areas (**Figure 7 on page 15**).

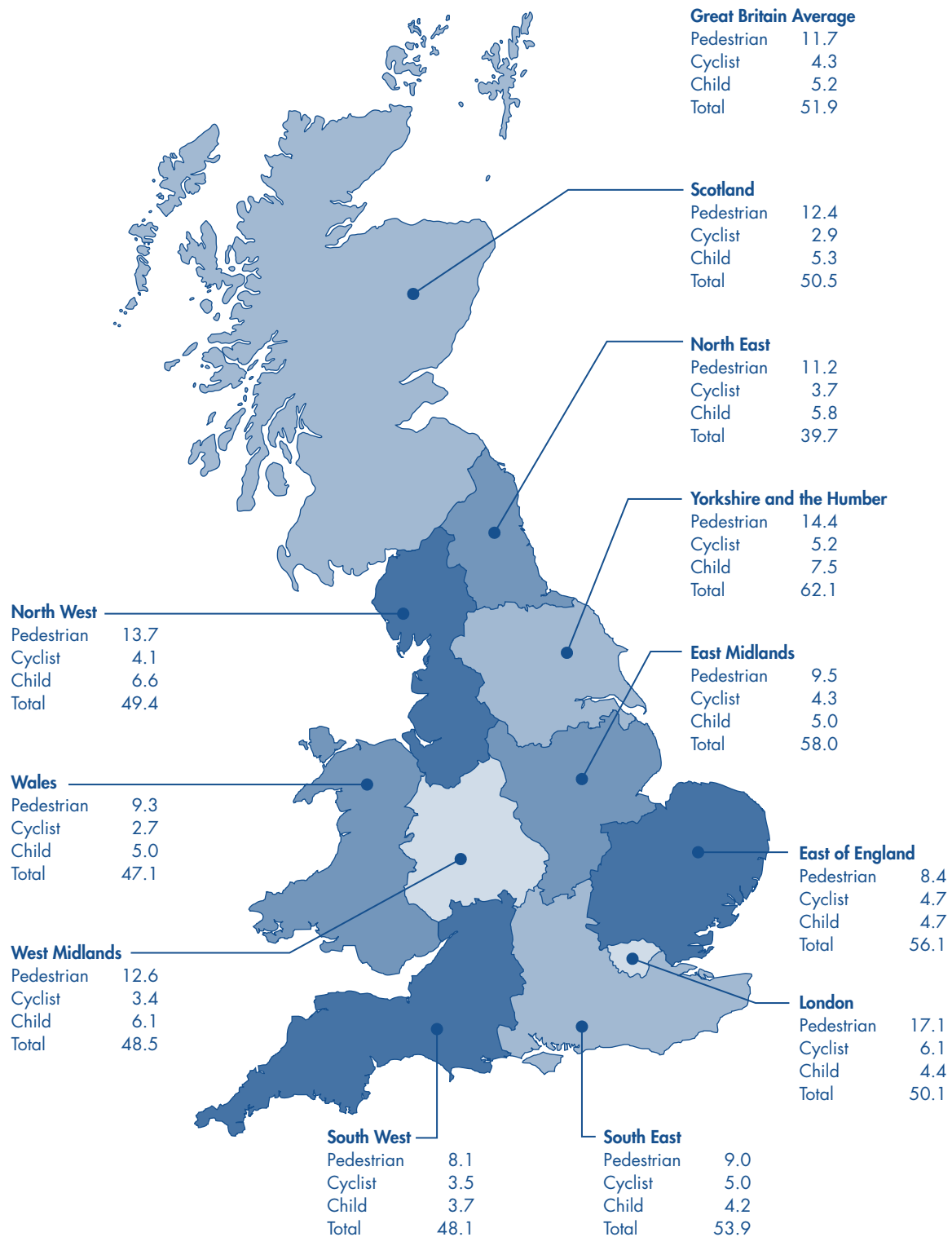
1.20 Understanding why high levels of deprivation are linked to higher road casualties is difficult, but significant factors include:⁶

- the immediate surroundings where people live, such as housing that opens directly on to busy through-roads, limited places for children to play, and no off-street parking meaning vehicles obscure pedestrians, especially children, when crossing; and
- the social and economic environment, such as supervision of children, low levels of parental education, or lower access to private motor vehicles.

⁶ *Widening the Reach of Road Safety – Emerging Practice in Road Safety in Disadvantaged Communities: Practitioners’ Guide*, Department for Transport Road Safety Research Report No. 97, 2008.

5

Regional analysis of recorded rates of road deaths and serious injuries per 100,000 population in Great Britain, 2007



Source: Department for Transport data

6 Pedestrian casualties per 100,000 population in the 10 per cent most deprived areas and the 10 per cent least deprived areas, 2007

Age of pedestrian casualty	Pedestrian casualties per 100,000 population		
	Most deprived	Least deprived	All areas
0 – 16	121	32	65
17 – 19	101	40	68
20 – 25	74	29	51
26 – 59	47	13	26
60 +	39	19	27
All ages	70	21	39

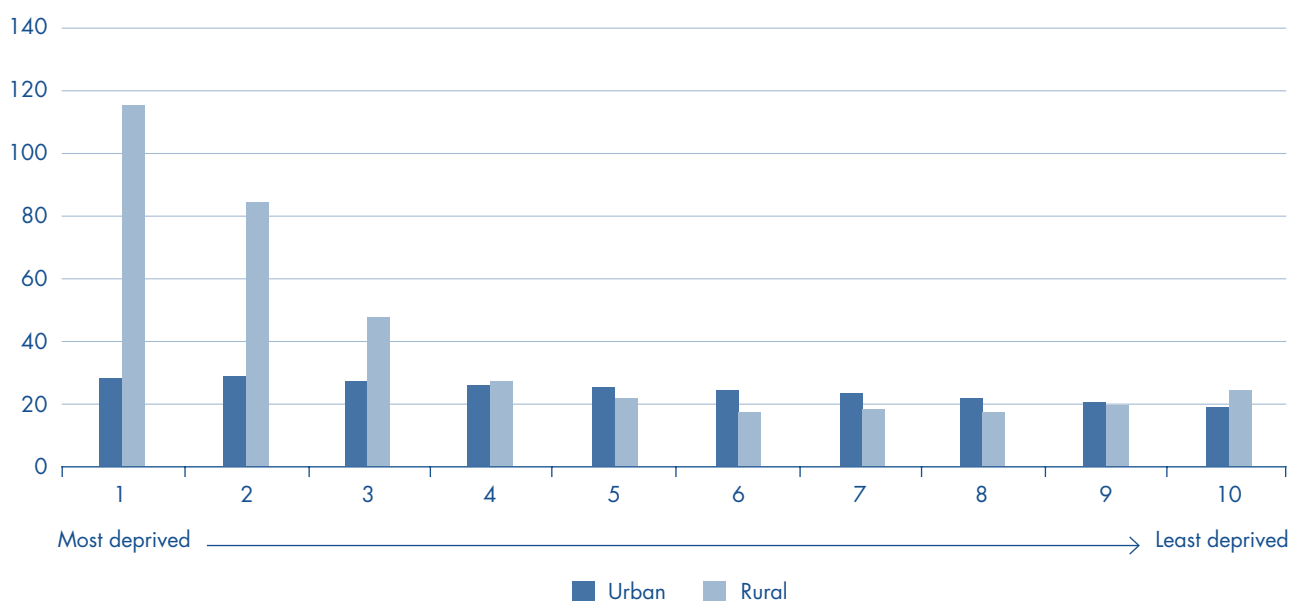
Source: Department for Transport data

NOTE

The Department's analysis splits England into over 30,000 small areas ranked by an index of deprivation, which takes many factors into account including income, employment and health deprivation. The above analysis shows the average for the 3,200 most deprived areas and the average for the 3,200 least deprived wards within this definition.

7 Cyclist casualties per 100,000 population, by urban and rural areas, and levels of deprivation, 2007

Pedal cycle casualties per 100,000 population



Source: Department for Transport data

NOTE

The Department's analysis splits England into over 30,000 small areas ranked by an index of deprivation which takes many factors into account including income, employment and health deprivation. The above analysis shows the average for the 3,200 most deprived areas and the average for the 3,200 least deprived wards within this definition.

When pedestrian and cyclist casualties occur

1.21 There are clear seasonal patterns to collisions which injure a pedestrian, with peaks generally occurring in October and November (**Figure 8**). The end of British Summer Time appears to be a significant factor. On average for the years 2000 to 2007, there were 10 per cent more collisions killing or injuring a pedestrian in the four weeks following the clocks going back than in the four weeks before the clocks changed. Research has shown that the period immediately after the clocks go back is more dangerous for road travel, even compared to other dark months such as January.⁷

1.22 There are also distinct patterns relating to the time of day when accidents occur, which, not surprisingly, are linked to when pedestrians and cyclists are most likely to be on the road. For example, nearly two-thirds of all cyclist casualties occur during the morning and evening rush hours on Monday to Thursday. Nationally 54 per cent of accidents involving child pedestrians occur between the hours of 3pm and 7pm (**Figure 9**) when they are more likely to be on the roads as they walk between for example school, home or parks.

Why pedestrian and cyclist casualties occur

1.23 The Department has also sought to carry out research into the factors which cause road accidents and pedestrian and cyclist casualties. In 2000, the Department contracted teams from Loughborough University and the Transport Research Laboratory⁸ to attend collision sites within 20 minutes of an accident occurring, to collect data surrounding a collision's circumstances. The Department expects that the teams will have collected data on around 4,500 accidents by October 2009.⁹ While this research examines all types of road casualties, the Loughborough University team is based in a more urban area than the Transport Research Laboratory team, and so it collects more information about pedestrian and cyclist injuries.

1.24 In 2005 the Department introduced for all police forces a new system to collect information on the factors that contribute to road traffic collisions. There are some issues with the reliability of the data. It is easy to record facts such as adverse weather conditions, but other factors are more difficult as they are the subjective view of the

police officer recording the data after the collisions have occurred; there is no ranking system for more important factors; and some factors are more difficult to ascertain, for example, whether a motorist was distracted. In 2007 the Department reported that, for every category of road user, the most prevalent factor was the casualty failing to look properly. Fifty-six per cent of pedestrians fell into this category, rising to 70 per cent for those under the age of 16. Forty-eight per cent of cyclists were also reported to have failed to look properly.

1.25 In short it is difficult to determine the factors that are most likely to result in serious injury or death for pedestrians and cyclists, as accidents are often the result of complex interactions of many factors including individuals' behaviours. There are some clear facts.

- Speed determines the severity of injuries to pedestrians and cyclists, whose chances of survival diminish rapidly at speeds greater than 20 miles per hour.
- Drink driving collisions do not affect pedestrians and cyclists as much as other road users. Pedestrians and cyclists accounted for 7.5 per cent of all people killed or seriously injured as a result of a drink drive road accident in 2007.
- Cyclists are more likely to be killed in collisions with lorries. In 2007 such collisions accounted for just two per cent of all collisions injuring cyclists, but for over 23 per cent of all cyclists killed. Buses and coaches are similar to heavy goods vehicles in size, but they are less likely to kill cyclists. This may be because they have lower driver positions, their blind spots are different, and there are fewer large spaces around the vehicles and their axles. In 2007 there were slightly more cyclist injury collisions involving buses or coaches than heavy goods vehicles, but collisions with the latter caused almost twice as many deaths or serious injuries. Some local authorities hold lorry-cyclist days to improve awareness on both sides and the Vehicle and Operator Services Agency with the Highways Agency, has, since November 2007 handed out free Fresnel lenses to drivers of left-hand drive heavy goods vehicles at border crossings in attempts to reduce motorway accidents, which could also help to reduce cyclist casualties.

7 *A new assessment of the likely effects on road accidents of adopting Single Double Summer Time*, Transport Research Laboratory Report 368, 1998.

8 The Transport Research Laboratory is an independent research company that is contracted by both private and public bodies to undertake research into transport matters.

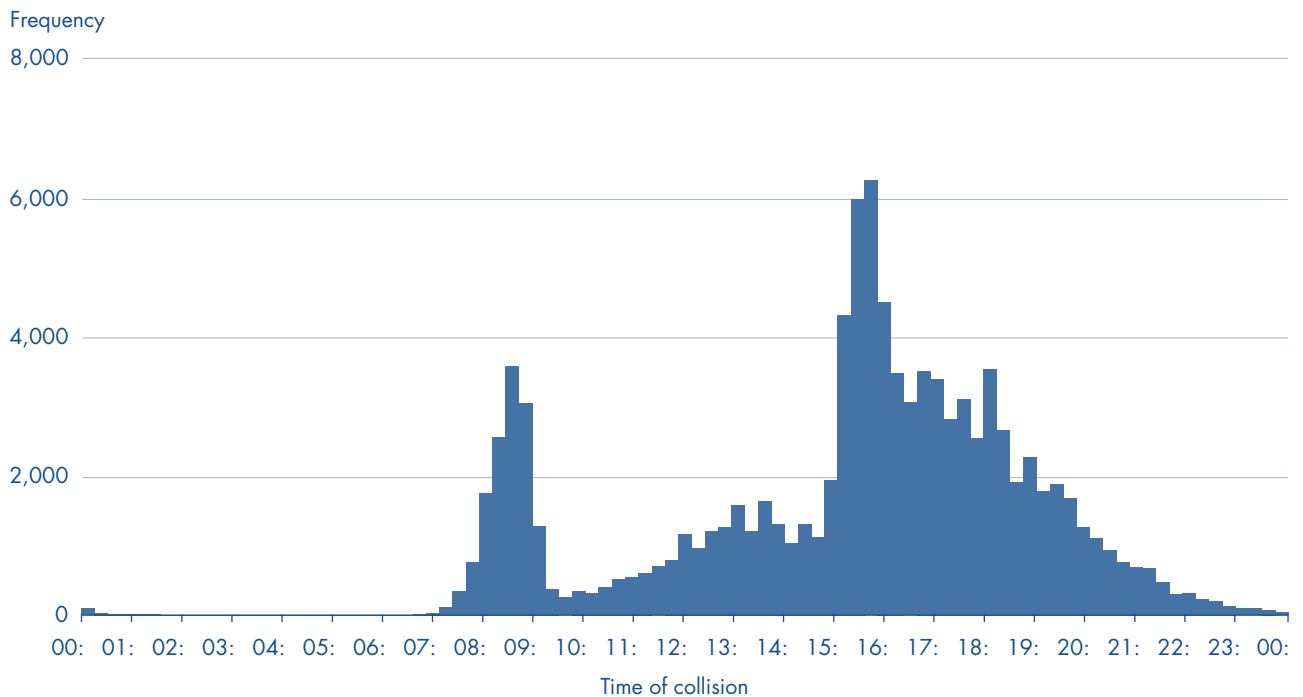
9 *The UK On The Spot Accident Data Collection Study – Phase II Report*, Department for Transport Road Safety Research Report No. 73, 2008.

8 Average number of road traffic collisions injuring a pedestrian by calendar month, 2000-2007



Source: Department for Transport data

9 All recorded road traffic collisions involving child pedestrians by time of day, 2007



Source: Department for Transport data

The Department's role and responsibilities

The Department's Road User Safety Division

1.26 The Department's Road User Safety Division, within the Road and Vehicle Safety and Standards directorate, is responsible for leading improvements in road safety for pedestrians, cyclists and for other road users. The Division is overseen by a Departmental Board Member with responsibility for transport safety. Other parts of the Department also influence road safety for pedestrians and cyclists. For example, the Cycling and Sustainable Travel Division promotes walking and cycling.

1.27 The Road User Safety Division has a programme budget of £36 million for 2008-09 and is responsible for forming road safety policy and strategy (accounting for some of the staff costs of £1.7 million); commissioning and managing research (£3.9 million); distributing grants to local highway authorities and non-governmental organisations to implement and demonstrate the effectiveness of new and innovative road safety schemes through demonstration projects and partnership grants (£14.3 million); and developing and implementing national publicity and training campaigns and materials (£17.8 million). It is also responsible for the legislative framework for road safety. The Department also allocates capital grants to local authorities: a specific road safety capital grant (£17.9 million in 2008-09); and capital funding for integrated transport within the local transport capital settlement (£577 million in 2008-09), of which, historically, around one-fifth has been invested in road safety.

1.28 The Department also contributes to central Government funding of local authorities through the Area Based Grant which is administered and distributed by the Department for Communities and Local Government. The Area Based Grant is not ring-fenced, but the Department for Transport's contribution to it in recognition of road safety initiatives is £234.2 million over the three years 2008-09 to 2010-11. Local authorities' statutory responsibilities for road safety are funded through the Revenue Support Grant, which is also not ring-fenced and it is not possible to say how much Government funding is provided for this purpose.

1.29 Local authorities are free to spend these grants according to their own priorities in line with the Government's commitment to pay local authorities grants on a non-ring-fenced basis wherever possible.¹⁰ In practice,

local highway authorities we spoke to stated that they did use this money for road safety. In line with Government policy to remove many of the reporting requirements and performance targets it had previously set for local authorities, the Department has reduced the amount of information it collects from English local authorities on road safety. Local authorities now agree with Government a set of up to 35 indicators, from a menu of around 200, two of which are road safety targets, by which they will be assessed. Fifty-two of the 152 English local areas included at least one of these indicators as a statutory target in their 2008-2011 agreements.

1.30 The Department estimated that the overall annual expenditure of local highway authorities, excluding Transport for London for which information was not available, on specific road safety schemes was over £135 million in 2005-06 (the most recent year for which information is available). This funding comes from a variety of sources and addresses many road user types. It excludes highway maintenance and other roads expenditure which will have road safety benefits. The Road User Safety Division views some of its expenditure of £36 million as pump priming for local highway authorities' expenditure, by providing research and information on what works and funding to develop new initiatives. The nationwide publicity campaigns to help change behaviour are aimed directly at road users. Generally measures to improve road safety will fall into one of three categories:

- Engineering – physical measures to improve the safety of vehicles or of roads.
- Education, training and publicity to influence the behaviours, attitudes and knowledge of road users.
- Enforcement – to punish individuals who contravene road traffic laws.

1.31 Other organisations also work directly or indirectly, to improve road safety for pedestrians and cyclists:

- The Driver and Vehicle Licensing Agency, the Driving Standards Agency, the Highways Agency and the Vehicle and Operator Services Agency.
- Other government departments, for example, the Home Office for policing and the Department for Children, Schools and Families for child safety.
- The police and the fire and rescue services.
- Non-governmental and third sector organisations.

¹⁰ This is set out in the Local Government White Paper 2006: *Strong and prosperous communities – the local government white paper*, DCLG, October 2006, Cm 6939-I.



Strategy and activities

2.1 In this Part we examine the Department’s strategy for improving road safety for pedestrians and cyclists, and the effectiveness of the activities that it undertakes.

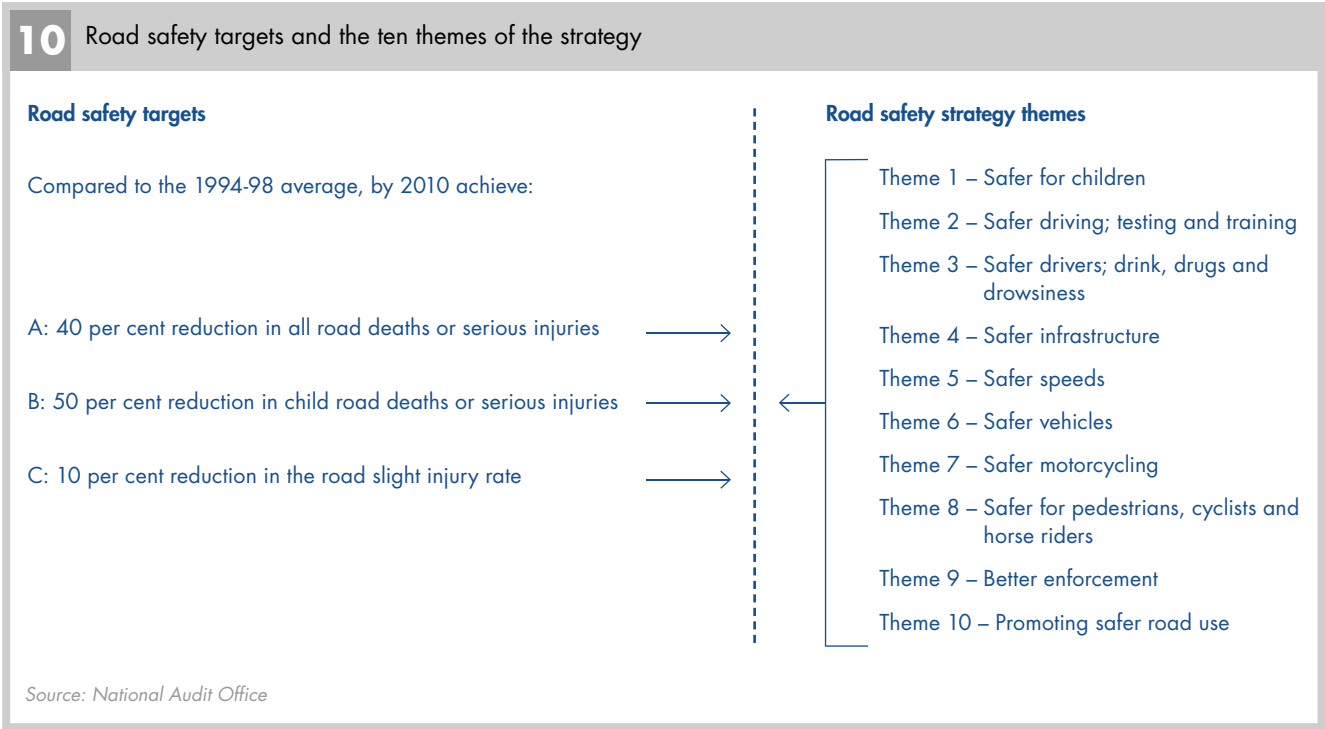
The road safety strategy

2.2 In March 2000, the Department with the devolved administrations in Scotland and Wales published the Government’s 10-year strategy for improving road safety in Great Britain. The strategy (**Figure 10**) comprises:

- High level targets for reducing road casualties (paragraph 1.5). Organisations with an interest in road safety have found the targets helpful as they are easy to understand and provide a clear objective for road safety activities. Developing and reporting against targets for reducing casualties among specific

groups of road users, including pedestrians and cyclists, would help to focus attention on vulnerable road users, or where there are particular problems, for example the recent rise in deaths and serious injuries among cyclists.

- Ten themes (Figure 10), one of which relates specifically to pedestrians and cyclists. The themes cover a mix of behaviours, factors and road users identified by the Department as needing attention to reduce casualties during the period to 2010. These themes do not map to the targets easily but are intended to help achieve them, and all will have an effect on pedestrians and cyclists. For example, reducing the urban speeds of motor vehicles reduces the risk of severe injury to pedestrians.



- One hundred and seventy five activities of which 21 are explicitly aimed at pedestrians and cyclists. Twenty-two other activities are likely to have a direct effect on pedestrians and cyclists and many of the remaining 132 activities are likely to have an indirect effect (Figure 11). For example, reducing the number of drink drivers through better enforcement will lessen the risk to pedestrians and cyclists. The

activities are comprehensive and cover all the key issues and factors that affect pedestrians and cyclists identified in Part One, and are supported and directed by the Department's research. For example, the Department used its research to direct the Neighbourhood Road Safety Initiative that focuses on deprived areas where there are high levels of pedestrian casualties, especially amongst children.

11 Road safety strategy: examples from the ten themes of activities aimed at pedestrians and cyclists

While the Department for Transport leads on this strategy and the activities within, the responsibility for delivery lies with many different organisations. For example, most infrastructure improvements are the responsibility of local highway authorities.

Theme	Summary	Examples of activities aimed at pedestrians and cyclists
Theme 1 Safer for children	Many activities are aimed at pedestrians and cyclists, as children frequently use these modes, especially when unaccompanied.	Child pedestrian training Road safety education at school Traffic clubs School travel plans Publicity campaigns aimed at children and younger people
Theme 2 Safer drivers – training and testing	These do not have any measures aimed directly at pedestrians or cyclists, but safer drivers will have greater awareness of other road users, and so the risk they pose to pedestrians and cyclists should diminish.	
Theme 3 Safer drivers – drink, drugs and drowsiness		
Theme 4 Safer infrastructure	This focuses on treating the whole road environment to improve road safety for all users.	Infrastructure improvements e.g. safer pedestrian crossings Route safety work for busy high streets Cycling demonstration towns
Theme 5 Safer speeds	Work includes setting and enforcing appropriate urban speeds that will help pedestrians and cyclists.	Encouraging more 20 mph zones Encouraging more 30 mph zones Publicity campaign on urban speeds Safety cameras
Theme 6 Safer vehicles	This is mainly aimed at car occupants, but some activities will help cyclists in particular.	Fresnel lenses to reduce blind spots on large vehicles
Theme 7 Safer motorcycling	No measures aimed directly at pedestrians or cyclists, but safer motorcycling should reduce pedestrian and cyclist casualties. In 2007 one in every 25 pedestrians killed was in a collision with a motorcycle.	

11 Road safety strategy: examples from the ten themes of activities aimed at pedestrians and cyclists (*continued*)

Theme	Summary	Examples of activities aimed at pedestrians and cyclists
Theme 8 Safer for pedestrians, cyclists and horse riders	Aimed at pedestrians and cyclists and includes activities that cut across many of the other themes.	Vehicle standards that reduce impact on pedestrians and cyclists Publicity campaign on pedestrian safety after drinking Driving theory test to include section on more vulnerable road users Neighbourhood Road Safety Initiative Partnership grant schemes Victim support National standard for cycle training Demonstration projects Sustainable transport towns
Theme 9 Better enforcement	Aimed at all road users.	New offence of causing death by careless driving Local polls on how safe people feel in their neighbourhoods
Theme 10 Promoting safer road use	Aimed at all road users.	Publicity aimed at pedestrians and cyclists <i>Think!</i> road safety national publicity campaign

Source: National Audit Office

2.3 In the five years to March 2009, the Department has spent over £17 million on research into road safety. The research programme is sub-divided into six themes, one of which covers pedestrians, cyclists and children. Research into issues affecting pedestrians, cyclists and children in 2008-09 include:

- child-parent interaction;
- improving the delivery of road safety education, training and publicity;
- pedestrian accidents involving goods vehicles, buses and coaches;
- Avon longitudinal study of parents and children road safety research;
- cycle helmet wearing in 2008; and
- road user safety and cycling.

2.4 The Department also funds projects that are trialling innovative ways of improving road safety (**Figure 12 overleaf** and Appendix 4).

- Since December 2001 the Department has approved four demonstration projects working with 30 local highway authorities to demonstrate how safety can be improved in different settings covering:

roads that carry high traffic volumes and other road users such as pedestrians and cyclists (mixed priority routes); areas of high deprivation and high child pedestrian casualties; inner cities; and rural roads. It has provided £28 million in funding up to 31 March 2008.

- The Department also allocated funds to 56 partnership grant projects that encourage different organisations to work together to improve road safety, 18 of which, supported by Departmental grants of £3.5 million, relate to improving the safety of pedestrians or cyclists.

2.5 The Department's approach is largely in line with that taken by other countries, although in developing its new strategy for 2010, there are some lessons which the Department could learn. For example, several other countries with good road safety records have 'visions' to accompany their strategies which provide an expression of commitment and coherence to the numerous activities undertaken by many organisations across the public, private and non-government sectors to improve road safety. Many countries and organisations now advocate a 'whole-system' approach to formulate road safety policy, in contrast to the Department's approach to focus on problem solving and the application of best practice

by local practitioners. While both have advantages and disadvantages, the 'whole-system' approach covers the 'post-crash' phase which can address factors that impact on the severity of injuries including: first-aid skill; access to medics; and ease of access to vehicles involved in collisions. Such factors are not currently covered in the Department's strategy. The Department is liaising with the Department of Health in the formulation of its new strategy, but the extent to which it will use health measures is currently unclear.

Strategy beyond 2010

2.6 The Department intends to publish a revised strategy for the period beyond 2010 by Autumn 2009, based on knowledge gained from its research programme, international links and the results of a public consultation exercise which it launched in April 2009. The Department expects to simplify its strategy and to assist local highway authorities in setting local targets by considering many factors, such as populations, traffic flows, casualty records and success of recent schemes.

The effectiveness of activities to improve road safety for pedestrians and cyclists

2.7 Most of the measures to improve road safety including those targeted at pedestrians and cyclists are carried out by local highway authorities and the Department's role is one of leadership. The Department therefore needs to encourage local authorities to take the most effective measures and to identify and remove barriers to implementation where possible. Both tasks have their own challenges. Measuring the effectiveness of road safety measures, particularly those that involve education and training, is not easy and even where measures can be shown to increase safety, there are other barriers to implementation.

Engineering schemes

2.8 Engineering schemes that alter a road's layout can sometimes resolve or alleviate problems which cause or contribute to pedestrian and cyclist casualties. In busy urban streets problems can occur because the road layout obscures the pedestrians, cyclists and other road users' vision. Pedestrians may also, for example, cross roads at places other than the designated crossing because they are inappropriately or inconveniently located. On many roads, especially minor residential roads, there are no designated crossing places. Installing or repositioning crossings can help to resolve such problems.

12 The Department's expenditure on road safety demonstration projects and partnership grant schemes

The Department's expenditure on demonstration projects (£000)

Scheme	Expenditure to 31 March 2008	2008-09	2009-10	Total
Mixed priority routes demonstration project	10,000	–	–	10,000
Neighbourhood road safety initiative	15,396	–	–	15,396
Inner city road safety demonstration project	2,527	3,473	–	6,000
Rural demonstration project	–	2,644	3,353	5,997
Total	27,923	6,117	3,353	37,393

The Department's expenditure on partnership grant schemes (£000)

Year	2007-08	2008-09	2009-10	2010-11	Total
Tranche 1 (27 projects)	3,022	2,323	–	–	5,345
Tranche 2 (19 projects)	–	1,407	750	–	2,157
Tranche 3 (10 projects)	–	–	2,342	1,216	3,558
Total	3,022	3,730	3,092	1,216	11,060

Source: Department for Transport data

NOTES

- Figures are actuals to 31 March 2008, unaudited forecasts for 2008-09 and budgets for 2009-10 and 2010-11.
- The total cost of all these projects may be higher as the participating local highway authorities sometimes spent additional sums.

2.9 There are well established and robust methods for establishing whether such engineering measures reduce casualties, by measuring the number of casualties at a given location and checking that any reduction has not been offset by an increase elsewhere. Even where there is good evidence that a measure is effective, local authorities can still find them difficult to implement.

2.10 For example, there is plenty of evidence that 20 mile per hour zones where the speed limit is enforced by physical measures such as road humps, are effective in reducing the incidence and severity of casualties. For example, a Transport Research Laboratory review¹¹ of 250 such schemes found that they reduced average speeds by nine miles per hour (compared to only one mile per hour in areas with a 20 miles per hour speed limit indicated only by signs¹²) and that the average number of accidents involving pedestrians, cyclists and children fell by 63 per cent, 29 per cent and 67 per cent, respectively.

2.11 Despite this evidence and the Road Traffic Regulation Act (Amendment) Order 1999 removing the requirement for local highway authorities to apply for permission from the Secretary of State on a case-by-case basis to lower the limit from 30 miles per hour, Road Safety Officers told us that they found it difficult sometimes to make the case for 20 mile per hour zones. The main difficulties are the cost of structural measures and getting agreement at local level.

2.12 Some of the demonstration and partnership projects sponsored by the Department are changing infrastructure to address road safety issues for pedestrians and cyclists. We examined projects in Birmingham and Brighton to identify the challenges that they faced with implementing infrastructure changes, and how they sought to overcome them.

2.13 The Birmingham Inner City Road Safety Demonstration Project is addressing accidents in areas of high deprivation, mainly affecting ethnic minorities, and includes a mixture of engineering schemes including traffic calming, junction redesign and one-way systems. Brighton and Hove's smaller North Street Partnership Project is improving several junctions and other features along a length of road. It is widening footways, reducing traffic flows and speeds, providing more crossing facilities closer to where people want to cross and reducing street clutter to reduce pedestrian casualties. In particular, collisions between buses and pedestrians often occurred when pedestrians failed to look properly in advance of crossing the road.

2.14 Both authorities had to make significant efforts to obtain agreement from and work within the constraints imposed by local interests, including local businesses, utility companies and citizens. Birmingham has addressed these difficulties by addressing other concerns: it has upgraded the street-lighting to current standards, where necessary, at pedestrian crossings and junctions to improve road safety and reduce the risk of crime. As a result, more people are likely to use the crossing, thus also benefiting businesses located near them. The Department's guidance (October 2008) on the implementation of successful mixed priority route schemes was based on lessons learned from 10 such schemes it had part-funded between 2003 and 2007. While local highway authorities welcomed this guidance, they commented that they would have liked more detailed information on wider, non-road safety benefits such as the economic benefits, which would help them in designing future schemes.

2.15 Both projects were also delayed, mainly because the Authorities had to negotiate with many local organisations and groups, making it difficult to work within the time constraints imposed by the Department. Birmingham has obtained a one-year extension to its project, and Brighton is currently forecasting that it will complete work six months after the Department's funding has ended. While the Department needs to exert management oversight of these projects and provide incentives for completion on time, being flexible about the completion timescales would allow schemes to reach a more mature stage of development and help it to collect fuller data and lessons from them.

2.16 Both authorities have established detailed evaluation plans to establish the success of the engineering aspects of their projects, including monitoring casualty numbers, traffic and pedestrian flows and observed pedestrian behaviour. Birmingham relies on the Department to advise on evaluation. Consultants will evaluate the scheme and will focus on how well the scheme has impacted on road safety; integrated road safety activity into the regeneration and other agendas; secured engagement and participation within a diverse community, and influenced local views about road safety; improved accessibility to jobs, services and leisure opportunities; and improved the quality of life. The evaluation will use a number of measures, including casualty numbers before and after scheme implementation. Brighton and Hove's evaluation will obtain and analyse data from a satisfaction survey sent to 3,000 local residents, traders and stakeholders.

¹¹ *Review of traffic calming schemes in 20 mph zones*, Transport Research Laboratory Report 215, 1996.

¹² *Urban speed management methods*, Transport Research Laboratory Report 363, 1998.

Education, training and publicity measures

The *Think!* campaign

2.17 The *Think!* campaign is the Department's education, training and publicity scheme on which it spent £17.6 million in 2007-08, nearly half of its annual road safety budget. In 2008 the Department had 12 media campaigns operational under the *Think!* brand. Of these, two were aimed directly at improving road safety for pedestrians and cyclists. The other 10 campaigns were aimed either partially or wholly at other users' behaviours but they may also have benefits for pedestrians and cyclists. For example, reducing the number of people who speed will reduce overall the number and severity of injuries sustained by pedestrians and cyclists.

2.18 Education campaigns aim to change attitudes and beliefs of road users to deliver the behavioural changes necessary to reduce road casualties. Unlike engineering measures, it is very difficult to link education directly to casualty reductions and requires expensive long-term research across fixed groups of people with similar characteristics, which is rarely feasible for short-term education measures. As a result, there is no direct evidence of the contribution that the *Think!* campaign has made to reducing casualties. The Department measures the campaign's success using annual surveys to assess: awareness of, and attitudes towards, the *Think!* road safety brand; general attitudes towards road safety and driving; and the perceived importance of road safety in relation to other social issues. The most recent survey (2006) showed that: three in five people said they had recently seen road safety advertising and four in five recognised the *Think!* logo; one in five people agreed that roads were safer than they were five years ago; and road safety was among the three most important social issues for only one in five people. It also undertakes a five-yearly research project to observe behaviours to correct for any bias in the self-reported data. These datasets are used to inform further work. For example, the Department developed a television commercial to increase teenagers' awareness of road safety issues, based on research which showed that teenagers felt that they had most freedom and control over their lives in the period immediately after school and that they were most vulnerable at that time.

Control groups for research projects

2.19 Making greater use of control groups would give greater confidence about the evaluation of the effectiveness of education and publicity activities. Kerbcraft, a child pedestrian training scheme, trained groups of children and also used control groups of

children similar in demography who did not receive training. This research allowed the Department's researchers to make more robust conclusions about the effectiveness of the training: they found strong statistical evidence that children crossed roads more safely after they were trained compared to children who were not trained.¹³ Many smaller schemes do not, however, make use of control groups, using only 'before' and 'after' measurements. The Department told us it has not used control groups recently as it is difficult to disentangle the effects of the many schemes that run concurrently.

Projects which focus on educating pedestrians

2.20 We examined projects funded by the Department in Bury, Essex and Oldham which focused on educating pedestrians. All three were mainly aimed at deprived areas, with Oldham and Bury focusing on child pedestrians and Essex focusing on pedestrians and other road users. Each Authority had different challenges in setting up the projects. Oldham found inaccurate postcodes in the casualty data, which at first prevented it from plotting many home locations of child pedestrian casualties to see if there were any patterns. Essex had to overcome delays in the procurement of its road safety demonstration vehicle, while Bury experienced delays in the recruitment of a central support team. It is too early to tell whether these projects have reduced casualties, as the practice is to use at least three years of casualty data after the project has finished. Bury considers its scheme to escort children to mosques to be a success: there are no figures for road injuries sustained on journeys from home to mosques before the scheme started, but to date, figures collated during and after the scheme show that none of the children who participated in this scheme sustained injuries. The scheme is no longer running due to a lack of funds.

2.21 The Department requires each participating authority to fund its own evaluation of its scheme. While each scheme monitors changes in casualty numbers, none of the projects have linked, or intend to link, casualty reductions to their specific activities. All the local highway authorities concerned have used, or are planning to use, various evaluative measures such as behavioural surveys and counting the number of children trained. The Department has provided guidelines to assist the local authorities' choice of evaluation methodology though it has not required the authorities to comply with them or to achieve a specific standard of evaluation.

¹³ *Evaluation of the National Child Pedestrian Training Pilot Projects*, Department for Transport Road Safety Research Report No. 82, March 2008.



Working with other organisations

Other organisations which influence road safety for pedestrians and cyclists

3.1 Other parts of the Department for Transport, a large number of external organisations across central and local government, and special interest groups also have an impact on the safety of pedestrians and cyclists by setting policies and standards, implementing measures, or lobbying to improve safety for these road users. In total, we identified 83 bodies but this list is not exhaustive (Appendix 5). The purpose and objectives of these organisations do not always align and they often compete for the attention and resources of the Road Safety User Division. Managing such a large number of relationships is difficult, and the nature of the Division's relationship with these bodies varies and is changing. Until now, the Department has not prioritised the importance of individual relationships to the achievement of its road safety objectives.

Relationships with those who set policies and standards

3.2 The Road User Safety Division has both formal and informal links with other policy divisions within the Department (**Figure 13 overleaf**), which set policies and standards that impact on the safety of pedestrians and cyclists. These relationships are driven by the needs of individual work programmes and by reporting chains within the Department.

- It has established a joint strategy team with, and contributes to standards and guidance produced by, other divisions in its management structure: Transport and Technology Standards¹⁴ and Traffic Management.¹⁵

- It reports to a different Board Member from the Cycling and Sustainable Travel Division, which promotes cycling and walking, although their respective policies are complementary. The Cycling and Sustainable Travel Division recognises that an increased uptake in cycling could lead to more accidents, and so seeks to do so in a way that makes cycling safer. In 2008-09 the Road User Safety Division liaised with the Cycling and Sustainable Travel Division to commission further research into a range of cycling road safety issues to inform its future work.
- The Road User Safety Division has more formal links with the Department's agencies, such as the Driving Standards Agency and Vehicle and Operators Services Agency that also impact on pedestrian and cyclist safety by seeking to improve driving standards and report to the same Departmental Board member (Figure 13). They are also all members of the Department's Road Safety Delivery Board (Appendix 6), and of various working groups including one on the new road safety strategy. The Road User Safety Division also worked jointly with the Driving Standards Agency on a major revision of the Highway Code.

3.3 Other Government departments and public sector organisations set policies and strategies which have an impact on the Department for Transport's work. The Department's relationships with these organisations have developed over time and in response to new initiatives. The strength of these relationships varies as does the priority other departments give to road safety issues.

- Effective enforcement is vital to improving road users' behaviour. The Department for Transport has a long-standing relationship with the Association of Chief Police Officers on roads policing and road

¹⁴ Transport and Technology Standards Division assesses the impact of vehicle engineering improvements on road safety and provides information for the Road User Safety Division, for example, to use in relevant road safety campaigns.

¹⁵ Traffic Management Division promotes road engineering standards, and publishes guidance for local highway authorities on how to address vulnerable road users' needs in highway schemes and how to build cycle routes.

safety enforcement. In addition, the Department relies on the police for its primary data source for measuring road casualties. The Department works less closely with the Home Office on a day-to-day basis, although it has worked with the Home Office on initiatives such as the new road safety strategy, the new police performance framework, and the joint roads policing strategy. It has also liaised with the Home Office in producing a Code of Practice for Victims of Crime, which provides advice to their families or family representatives about the support services that they can receive under the Code, and which was published by the Office for Criminal Justice Reform in October 2005.¹⁶

- Improving child safety on the roads is a key strand of the Government's Public Service Agreement to improve the safety of children and young people, introduced in October 2007. Two of the four indicators for measuring progress relate in part to road traffic collisions. The Agreement has provided a focus and impetus for the Department for Children, Schools and Families, which takes the lead on the Agreement, and the Department for Transport to work more closely together. The Department for

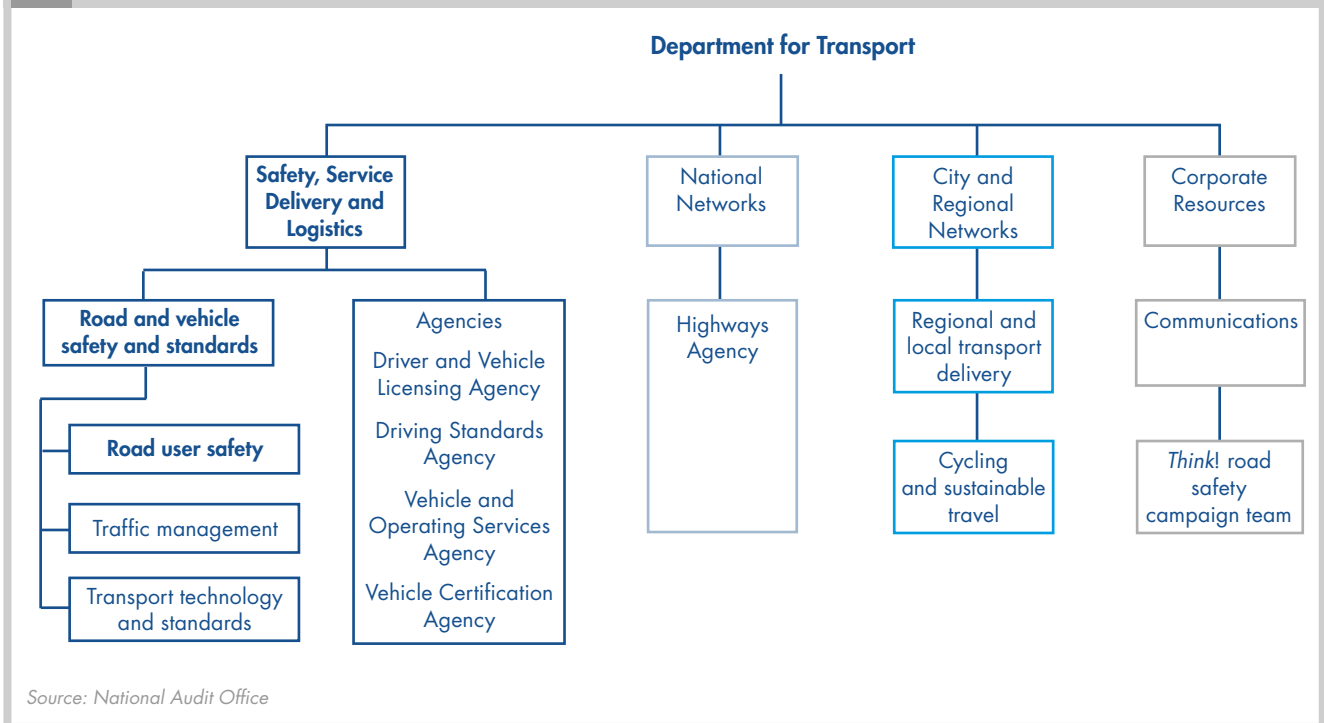
Transport is represented on the Board which oversees delivery of the Agreement, and the Road User Safety Division leads the working group on preventing accidents to children and young people on which the Department of Health is also represented.

- Encouraging more walking and cycling is an important part of the wider health improvement and physical activity agenda. The Department for Transport is starting to work more closely with the Department of Health both in this area and in accident prevention, working on a review¹⁷ of the effectiveness of local area accident prevention, which also involved the Department for Children, Schools and Families.

Relationships with practitioners

3.4 Most road safety schemes and infrastructure work on roads are implemented by either local highway authorities or the Highways Agency. The Highways Agency is responsible for the strategic network of motorways and trunk roads, where few accidents involve pedestrians and cyclists. This section focuses therefore on the Department's relationship with local highway authorities, which are responsible for all other roads.

13 Summary functional structure of the Department in relation to road safety



¹⁶ The Office for Criminal Justice Reform transferred from the Home Office to the Ministry of Justice when it was formed in May 2007.
¹⁷ Accident Prevention Amongst Children and Young People - A Priority Review, February 2009.

3.5 Individuals within local highway authorities were largely positive about their working relationship with the Department. Many felt that the Department worked hard to engage with them, and they considered that they had an adequate understanding of the Road User Safety Division's views, even when they did not agree with the decisions or policies. Many of the relationships have developed over several years, are based on personal knowledge of the subject and are informal. Many of these relationships were created when the Department played a more direct role in delivery and had greater control over the distribution of road safety funding. The Department has few formalised processes aimed at managing these relationships and, overall, its stakeholder management arrangements lacked structure.

3.6 One of the key ways in which the Department can influence practitioners is through its research papers and best practice guides published on its website. Local highway authorities and other organisations told us that the volume and length of the reports have in the past made it difficult for them to distil and use the information. Our findings confirm those of a report¹⁸ commissioned by the Department which concluded that:

- the volume of research makes it difficult to navigate and future dissemination should focus on simplifying access and improving awareness;
- research is often written with policy makers or other researchers in mind, rather than practitioners;
- stakeholders and practitioners have a valuable perspective and the Department could involve them more in shaping research programmes; and
- more could be done to integrate the work of different groups of practitioners involved in road safety and improve their shared understanding of the evidence base for effective practice.

3.7 The Department has begun a new road safety research dissemination programme, the primary output of which is a series of six seminars per year for road safety practitioners to discuss research papers and ongoing demonstration and partnership projects. Road safety practitioners welcomed these seminars, but would find them more useful if there were more informal workshops and networking events. The Department has also started to publish four-page summaries of research papers alongside the full-length reports.

Relationships with special interest groups

3.8 Eleven groups with an interest in promoting road safety or the interests of pedestrians and cyclists provided us with comments on their relationship with the Department (Appendix 7). Generally they would welcome greater consultation with the Department in developing and implementing road safety policy and schemes, and several were willing to provide additional support to the Department's road safety activities. Respondents suggested several ways in which the Department might improve the safety of pedestrians and cyclists including improving speed awareness training among new drivers; promoting the adoption of 20 miles per hour limits on all urban roads; and increasing the number of road safety initiatives for particular groups, such as older people.

Strategy for working with other organisations

3.9 The Road User Safety Division, therefore, has to engage with a large number of diverse organisations to promote road safety, and its approach to date has been informal and ad hoc. It now has to rely on its expertise and specialist knowledge to influence and persuade others to direct resources to tackle those areas which are of greatest strategic importance. To date, the Department has not analysed the sources, nature and relative strengths of the various levers that it has to influence other organisations and needs to adopt a more formal and strategic approach to working with these organisations.

3.10 One of the conclusions from the Cabinet Office's Capability Review,¹⁹ was a general view that the Department for Transport does not always work effectively with other organisations to maximise the delivery of its activities across all its policy areas. In response, the Department has set up the Focal Point initiative to give more structure to the management of external relationships by identifying key organisations and assigning senior departmental officials as account managers. This is a positive first step, but needs to be applied at all levels of the Department. Road Safety would be a prime area given the number and complexity of organisations working in the area.

¹⁸ *Road Safety Research Dissemination and Action Learning Programme*, Department for Transport Road Safety Research Report No. 83, 2008.

¹⁹ *Capability Review of the Department for Transport*, Cabinet Office, June 2007.

3.11 As part of this study, we worked with the Road User Safety Division to identify ways in which it could improve how it worked with other groups and the challenges in doing so.

- It needs to engage at different levels within organisations. For example, within local authorities it needs to have more contact with councillors and heads of children's services, as well as with heads of transport and road safety officers.
- It needs to review regularly the strength, quality and priority of its relationships with other organisations, for example, identifying which of the other Government departments have the most impact on road safety, and how it can work more closely with them.
- There are several challenges including: lack of staff time on both sides; the lack of priority afforded to road safety by some organisations; and the need for the Department to provide clear messages.

APPENDIX ONE

Methods

Overview

1 We carried out the majority of fieldwork for this report between August and October 2008. The work on the Department's national road safety publicity campaign was undertaken in March and April 2008. Our methods comprised:

- statistical analysis;
- literature review;
- case examples;
- economic cost analysis;
- financial analysis;
- written consultation with stakeholders;
- stakeholder analysis;
- semi-structured interviews;
- international comparisons; and
- document review.

Statistical analysis of Great Britain casualty data

2 We obtained a copy of the Department's database of police casualty data and performed statistical analysis to:

- corroborate the findings from the Department's own analysis;
- identify specific areas of concern for pedestrians and cyclists by region and other factors; and
- support our work with specific examples.

The analysis was undertaken by our in-house qualified statisticians.

Literature review of studies into quality of Great Britain's casualty data

3 We reviewed literature published since 2001 on the quality of the police data and other sources of casualty statistics. The review looked at findings on: casualty statistics reporting levels; accuracy of reporting; changes over time; and estimates of levels of under-reporting. The review also examined the rigour of the methods of the studies and the independence, objectivity and competence of the researchers.

Case examples

4 We selected five examples of the Department's demonstration and partnership projects. We chose three from the Department's first round of its partnership grant scheme, because this is a model the Department plans to use more in the future. The other two examples were of large demonstration projects: one in the later stages of delivery and one post-evaluation. These examples were:

- Birmingham City Council – Inner City Safety Demonstration Project;
- Brighton & Hove City Council – Partnership Grant Scheme Round 1 – The North Street Project;
- Bury Metropolitan Borough Council – Neighbourhood Road Safety Initiative;
- Essex County Council – Partnership Grant Scheme Round 1 – Community Wheels project; and
- Oldham Metropolitan Borough Council and the Unity Partnership – Partnership Grant Scheme Round 1–3 'til 7 project.

5 We examined these projects by: interviewing the project managers and other officials; reviewing project documents including bids, assessments, claims and evaluations; and analysing the pedestrian and cyclist casualty statistics for each location.

6 We also examined the Department's national road safety publicity campaign, which accounts for over half of the Department's budget on road safety.

Economic cost analysis

7 We calculated the estimated cost to the economy of road casualties in each of our chosen road user groups using data contained in the Department's Highways Economics Note 1 (data contained in this Note has not been audited by the National Audit Office). The Note contains estimates, at 2007 values, of the average value to the economy of preventing casualties according to their severity: death, serious injury and slight injury. We applied these values to the numbers of pedestrian and cyclist casualties in each severity type reported by the Department in 2007.

Financial analysis

8 We analysed the funding for road safety, including the expenditure the Department incurred in 2007-08 and 2008-09 on its road safety activities. We also examined the expenditure the Department distributed to local highway authorities in settlement for their Local Transport Plans, as the authorities spend up to one-fifth of this money on road safety activities. Other items we looked at included: the Specific Road Safety Grant; Local Area Agreement funding; the Area Based Grant; the Revenue Support Grant; and Supported Capital Expenditure.

Written consultation with stakeholders

9 We wrote to senior officials in key stakeholder groups asking for their views on a number of matters, including: the Department's consultation procedures; the Department's support for their organisation; and involvement in road safety scheme implementation. The information obtained was used to direct our work in other areas such as semi-structured interviews and case examples. Appendix 7 has a summary of our findings from this consultation.

Stakeholders we consulted in writing:

20's Plenty For Us
 British Cycling
 Cyclenation (formerly the Cycle Campaign Network)
 Help the Aged
 RoadPeace
 The Automobile Association
 The Institute of Advanced Motoring Trust
 The Institute of Highways Incorporated Engineers
 The Royal National Institute for Deaf People
 UK Roads Board
 UK Youth

Stakeholder analysis

10 We commissioned KPMG to undertake stakeholder analysis on our behalf. KPMG identified and mapped the Department's road safety stakeholders. It evaluated the current relationships between the Department and its road safety stakeholders, and the effectiveness of the Department's current road safety stakeholder management. KPMG also facilitated a workshop with the Department's staff to: develop a prioritised list of stakeholders; review the Department's sources of influence; and construct plans for further research and evaluation.

Semi-structured interviews with stakeholders

11 We conducted semi-structured interviews with staff in the Department responsible for areas related to road safety, other stakeholders in the Department, and externally. We asked the stakeholders about their role in road safety for pedestrians and cyclists; the Department's role; their liaison with the Department; targets and the quality of the data; and specific challenges to improving road safety for pedestrians and cyclists.

Stakeholders we interviewed:

Association of British Insurers

Audit Commission

County Surveyors Society

CTC

Department for Children, Schools and Families

Department for Transport

- Association of Chief Police Officers liaison officer
- Communications
- Cycling and sustainable travel
- Statistics roads
- Road user safety
- Transport and technology standards

Department of Health

Driver and Vehicle Licensing Agency

Driving Standards Agency

Highways Agency

Home Office

Living Streets

Local highway authorities

Ministry of Justice

Parliamentary Advisory Council for Transport Safety

Royal Society for the Prevention of Accidents

Sustrans

The Local Authority Road Safety Officers Association

Transport for London

Transport Research Laboratory

Transport Select Committee

Vehicle and Operator Services Agency

International comparisons

12 We chose six countries to compare with Great Britain: Australia, Canada, the Netherlands, New Zealand, Norway, and Sweden. We chose these countries on the basis of their recent road safety records; road safety issues for pedestrians and cyclists they faced; approaches to road safety strategies; and cultural similarities. We also examined more broadly the road safety records of all Organisation for Economic Cooperation and Development countries, and reviewed documents published by international bodies such as the European Transport Safety Council. Appendix 3 details our findings from this work.

Document review

13 We reviewed the Department's policy, strategy and business planning documents for its Road User Safety Division and governing directorate.

APPENDIX TWO

Other sources of road safety data

1 The primary data that the Department uses to measure road safety is road casualty data collected by the police. But not all accidents are reported to the police and independent research and work by the Department has shown that the police data understate the levels of serious and slight injuries. In 2006 the Department published research which concluded that it should use other data sources to help it measure road casualties. Our analysis corroborates this finding.

2 We found that there are other sources of data held within central government bodies that the Department could use, at least at the national level (**Box 1**). While there are likely to be problems of accuracy and completeness of any datasets within this field, there is scope to use such sources of data to supplement that collected by the police to gain a more informed view of road safety, to help it to make decisions and to corroborate the completeness and accuracy of the police data.

BOX 1

Data sources that could enrich the Department's understanding of road safety

Health data

- Hospital Episodes Statistics (hospital admissions) data
- Accident and emergency data
- Ambulance service data

Insurance claims data

- Department for Work and Pensions motor collisions compensations claims data
- Association of British Insurers members data

Health data

3 The most readily available national database, and one that the Department is examining, is that of hospital admissions data, owned by The NHS Information Centre. The database includes information on the numbers of people admitted to hospital for injuries sustained in road traffic collisions. By definition, all people admitted for inpatient treatment as a result of a road traffic collision would be regarded by the Department for Transport as seriously injured.

4 For the financial year 2006 07, hospital admissions data recorded 64 per cent more serious injuries (some 15,900 casualties) across all road user types than the police data. It also recorded 41 per cent more pedestrian serious injuries (around 2,200 casualties) and over three times as many cyclist serious injuries. Many of the cyclist serious injuries which were in the hospital data, but not in the police data, did not involve a collision with another vehicle or object. When these are removed there were still 18 per cent more in the hospital database. The Department has begun to assess the feasibility and usefulness of matching hospital admission data and police road casualty data, and intends to do this routinely at some point in the future. This is unlikely to be ready in time, however, to incorporate a performance indicator based on the hospital data in its new strategy.

5 The definition of “serious” casualties in the police data is wide, and includes all casualties admitted to hospital, all fractures, however minor, and other injuries such as severe cuts whether or not requiring hospital admissions. The hospital admissions data is, therefore, in itself, an incomplete picture of road casualties since not all persons classified in the police casualty data as seriously injured will be admitted to hospital. There will be a class of individuals who are treated in Accident and Emergency for serious injuries sustained on the road, but who are discharged afterwards. There is, currently, a national database of accident and emergency attendances, from which data was published in November 2008 as ‘experimental statistics’. Not all NHS Trusts have complete data submissions, however, and data quality is poor in some cases, so it is inappropriate to use the data for these purposes at present. If this is to be useful for understanding road safety, any such database must include the type of road user, such as pedestrian or car occupant.

Compensation claims data

6 The Department for Work and Pensions Compensations Recovery Unit collects data on recovering the costs of NHS treatment from claims for personal injuries that occur from all causes, including road accidents. The Department for Transport would need to liaise with the Department for Work and Pensions if it wanted to obtain reports from this database to inform its work. This data will not be a complete record of all road casualties as it only records those who received NHS treatment and subsequently made a compensation claim. However, routine monitoring of this data by the Department would help it to confirm or supplement its understanding of road casualty numbers and trends.

7 Information provided to us by the Unit relating to motor vehicle collisions shows that, when all slight and serious injuries are aggregated, there are nearly twice as many casualties as recorded by the police data used by the Department to monitor road safety.

The number of road casualties

8 The police data is a long-standing time series, and the Department recognises that not all accidents are recorded as some of them are not reported to the police. There have been a number of studies of under-reporting, dating back to the 1970s, and from the limited data available it is estimated that there may be about twice as many casualties as are reported, although very few fatalities are unrecorded. The Department does not adjust its figures to correct for under-recording as the estimates are not yet reliable enough. **Figure 14** compares the indicative numbers of seriously injured road casualties recorded in the police data and the hospital admissions data in 2006-07. There are around two-fifths more pedestrian serious casualties; one-fifth more cyclist serious casualties; and three-fifths more road casualties of all types in the hospital data than the police data.

14 Comparison of police and hospital data

There are more road serious injuries in England recorded by hospital admissions data than by the police data.

	Hospital admissions data, road casualties, 2006-07	Police road casualty data, serious injuries, 2006-07	Percentage of injuries recorded in hospital data
Pedestrians	7,688	5,452	141
Cyclists	6,956	2,119	328
of which in collisions	2,262	1,921	118
Other road users	25,938	17,121	151
Total	40,582	24,692	164

Source: National Audit Office analysis of Department for Transport and The NHS Information Centre data

9 We also examined compensation claims data held by the Department for Work and Pensions, and found that there were 504,000 motor liability claims in the compensations claims data, which is around twice the total number of road casualties recorded in the police data. Of those 504,000, around 13,000 were recorded as inpatients in hospital. This compares with 40,582 inpatients recorded in the hospital admissions data, and suggests that around a third of people hospitalised as the result of a road traffic accident subsequently go on to claim compensation.

10 The Department's annual National Travel Survey in 2007 recorded that 1.8 per cent of respondents aged 16 or over stated that they had been injured in a road traffic collision in the previous 12 months. Using the Office for National Statistics' mid-2007 estimates of the population of Great Britain, this would suggest around 865,000 road traffic collision injuries, which is over three times the level suggested by the police road casualty data. The Department told us that the National Travel Survey estimates are derived from survey data, however, and will be subject to margins of error. While all these additional figures will have some degree of error in them, these other sources confirm earlier work and suggest a significantly higher number of road casualties than the police data records.

Trends in other data sources

11 The trend in the police data is that the number of all severities of injury is falling. The Department cannot be sure whether the under-reporting of casualties has changed over time, although on the basis of the analysis that has been done on hospital admissions data, it believes that the police data remains the best source for monitoring trends. The compensations claims data for all motor liability claims shows an increase of approximately 26 per cent since 2002, which contradicts the trend in the police data which has shown a decrease of 18 per cent over the same period. The trend in the hospital admissions data has shown a slight increase over the same period. Since it was introduced in 1989 the way the hospital admissions data has been collected has changed, and so using it to measure trends has been problematic in the past. However, the Department for Transport anticipates that this will be less difficult in future as it is reaching a steady state.

12 These data sources are currently collected for different purposes and there will be a variety of reasons why the trends are different, some of which are not genuine road safety effects. For example, the Association of British Insurers told us that their members' data showed that claims for slight injuries was on the increase and that part of this increase may reflect a more litigious society.

13 The use of other sources of data, such as those discussed at paragraphs 3 to 10 above, not only presents an opportunity to gain a better understanding of the numbers and trends of road casualties than could be provided by one source, but it also presents the Department with an opportunity to estimate the level of under-reporting within its chosen measure of road safety and to correct for this. The European Road Safety Observatory has highlighted the Netherlands' system for correcting under reporting of road casualty deaths as an example of best practice. It links three data sources (police, court and municipality records) by a number of factors such as dates of birth and death and aggregates the data for use by the Ministry of Transport. The data sources' individual reporting rates were 90 per cent, 88 per cent and 95 per cent, and the combined reporting rate is over 99 per cent. Such an approach is simpler for deaths than it is for injuries, as the Department's work to match hospital data with police data has shown.

APPENDIX THREE

International comparisons

1 Great Britain's record on overall road deaths is good in comparison with other countries, ranking fifth out of 24 countries examined by the Organisation for Economic Cooperation and Development for 2006 for which data was available. Great Britain's performance is less satisfactory

however, when considering performance for pedestrians where Great Britain ranked eleventh, and for child pedestrian deaths it ranked only seventeenth, some way behind the best (Figure 15).

15 Road deaths – international comparisons, 2006

Road deaths per 100,000 population		Pedestrian deaths per 100,000 population		Children (aged 0-14) deaths per 100,000 population		Child pedestrian (aged 0-14) deaths per 100,000 population			
1	Netherlands	4.46	1	Netherlands	0.40	1	Finland	0.00	
2	Sweden	4.92	2	Sweden	0.61	2	Iceland	0.00	
3	Switzerland	4.97	3	Norway	0.75	3	Netherlands	0.20	
4	Norway	5.21	4	Germany	0.86	4	France	0.20	
5	Great Britain	5.39	5	France	0.88	5	Germany	0.33	
6	Denmark	5.64	6	Finland	0.93	6	Norway	0.33	
7	Japan	5.70	7	Switzerland	1.02	7	Belgium	0.33	
8	Germany	6.18	8	New Zealand	1.07	8	Portugal ²	0.34	
9	Finland	6.39	9	Denmark	1.11	9	Denmark	0.38	
10	France	7.71	10	Australia	1.11	10	Switzerland	0.42	
11	Australia	7.79	11	Great Britain	1.15	11	Great Britain	1.35	
12	Austria	8.86	12	Belgium	1.16	12	Iceland	1.54	
13	Canada	8.88	13	Canada	1.17	13	Canada	1.72	
14	Portugal	9.15	14	Austria	1.33	14	Austria	1.76	
15	Spain	9.42	15	Iceland	1.34	15	Belgium	1.78	
16	New Zealand	9.48	16	Spain	1.41	16	Spain	1.78	
17	Belgium	10.19	17	Portugal	1.47	17	Australia	1.93	
18	Iceland	10.37	18	USA	1.60	18	Czech Republic	2.13	
19	Czech Republic	10.40	19	Slovenia	1.80	19	Greece	2.26	
20	South Korea	13.07	20	Japan	1.85	20	Poland	2.51	
21	Slovenia	13.16	21	Czech Republic	1.98	21	New Zealand	2.85	
22	Poland	13.76	22	Greece	2.40	22	USA	2.95	
23	USA	14.26	23	Poland	4.73	23	South Korea	3.06	
24	Greece	14.91	24	South Korea	5.04	24	Slovenia	3.20	
							17	Great Britain	0.62
							18	New Zealand	0.68
							19	Greece	0.69
							20	Denmark	0.79
							21	Czech Republic	0.80
							22	Poland	0.95
							23	Slovenia	1.07
							24	South Korea	2.20

Source: Organisation for Economic Cooperation and Development International Road Traffic and Accident Database, International Transport Forum, European Commission road accidents database

NOTES

1 Most countries count a fatality if it occurs within 30 days of the collision, but some do not. Death rates in the above table have been adjusted using Economic Commission for Europe factors to allow comparisons to be made.

2 2005 population data.

2 Figure 16 shows that the United Kingdom is fourth out of 14 nations for which data was available in 2006 in terms of cyclist fatalities per million inhabitants, although this will vary considerably depending on the amount of cycling in each of these countries.

3 We compared, through literature review, the Department’s approach to managing the safety of pedestrians and cyclists with those of six other countries: Australia, Canada, the Netherlands, New Zealand, Norway and Sweden. We selected these countries for comparison based on a variety of factors including their recent road safety records, road safety issues faced by pedestrians and cyclists and their cultural similarities. In particular, we sought evidence about the strategic approach followed by each country, including target setting, and the ways in which the national transport authorities worked with other organisations to deliver road safety initiatives within these groups. The results are summarised at Figure 17.

4 We found that all the countries that we examined had long-term strategies to reduce road casualties, including among the most vulnerable road users. As in Great Britain, the strategies generally incorporated quantified targeted levels of casualty reduction which were focused on final outcomes aimed at eliminating death and serious injury in the road traffic system. Targets were often based on the numbers of people killed or seriously injured expressed as a percentage reduction in casualty numbers although in Australia targets were framed as reductions in casualty rates, for example, deaths per 100,000 population. Three countries examined have adopted a highly ambitious long term goal to eliminate road traffic deaths completely, for example Sweden’s “Vision Zero”, and in two cases they have also adopted interim targeted reductions.

5 Unlike Great Britain and other countries examined, Canada has adopted an intermediate outcome target to reduce the number of fatally or seriously injured casualties within the most vulnerable road user groups, including pedestrians and cyclists.

6 New Zealand is unique among the countries examined in adopting an integrated hierarchy of output and outcome focused targets. New Zealand’s overall target is to reduce the socio-economic costs of road accidents, which is calculated to take into account the total cost of accidents on the community including medical treatment, property damage and pain and suffering of individuals. This target is supported by a second tier final outcome-based target to reduce the number of fatalities and serious injuries. A third tier of targets comprises a series of intermediate performance indicators related to, for example speed and drink driving. Finally, New Zealand has adopted a range of intermediate output targets such as enforcement targets, which are required to achieve the third tier targets.

16 Cyclist fatality rates per million inhabitants by country, 2006

Rank	Country	Cyclist fatality rate
1	Malta	0.0
2	Spain	1.7
3	Greece	1.9
4	UK	2.5
5	France	2.9
6	Sweden	2.9
7	Portugal	3.8
8	Finland	5.5
9	Denmark	5.7
10	Austria	5.8
11	Belgium	8.8
12	Estonia	9.7
13	Czech Republic	10.7
14	Hungary	15.2

Source: European Road Safety Observatory

7 Several countries' strategies are underpinned by a "whole-systems approach" to road safety. This approach was pioneered by Sweden and adopted, to various degrees, in Australia, Norway and the Netherlands. The whole-systems approach tackles road safety in a multi-layered way. It promotes activities which are aimed first at preventing accidents occurring at all, second by minimising the degree of physical harm that would be suffered by individuals in the event of an accident occurring and, finally, activities which improve the physical care of road accident casualties who have been involved in an accident. This approach combines behavioural approaches to road safety with enforcement and road/vehicle engineering initiatives and includes measures to reduce casualties amongst pedestrians and cyclists. Of the countries examined, only Australia's road safety strategy addresses the improved health care element of this approach. While Great Britain has not formally adopted the whole-systems approach, its road safety strategy incorporates many aspects inherent in the approach, although the post-crash scenario is not addressed in any detail.

8 As in Great Britain, all countries examined rely on a range of other organisations, both governmental and non-governmental, to deliver road safety initiatives within the community and face similar challenges in managing relationships with them so as to influence their activities to achieve their strategic objectives. In Victoria, Australia, for example, the transport department works in collaboration with other key organisations to reduce road casualties and has created a formal partnership under which the road safety strategy is co-sponsored by government ministers from different departments, including for the police and emergency services. The co-ordinated approach is managed by a Road Safety Management Group comprising representatives of the various departments.

17 Comparison of road safety management practices

Issue	Australia	Canada	Netherlands	New Zealand	Norway	Sweden	Great Britain
Do countries have long-term strategies for reducing road casualties, including pedestrians and cyclists?	✓	✓	✓	✓	✓	✓	✓
Are strategies based on the "whole-systems" approach to improving road safety?	✓	✗	✓	✗	✓	✓	✗
Do strategies articulate specific initiatives to reduce pedestrian and cyclist casualties?	✓	✓	✓	✓	✓	✓	✓
Do countries use quantified targets to measure performance?	✓	✓	✓	✓	✗	✓	✓
Are there separate targets for pedestrians and cyclists?	✗	✓	✗	✗	✗	✗	✗
Are the targets based on final outcomes?	✓	✓	✓	✓	✓	✓	✓
Do countries adopt intermediate indicators to measure progress towards achieving the final outcomes?	✗	✓	✗	✓	✓	✗	✗
Are there formal structures in place for managing relationships with other organisations in the delivery network?	✓	✓	✓	✓	✓	✓	✓

Source: National Audit Office

APPENDIX FOUR

Case examples of the Department's demonstration and partnership projects

1 The Department provides funding to local highway authorities and their local area road safety partnerships for demonstration and partnership projects under a specific set of themes determined by the national policy and priorities in the government's road safety strategy. These priorities range from an emphasis on partnership working to addressing the specific road safety issues faced by the most deprived communities.

2 The Department conducts this work alongside its research and policy activities. Other local highway authorities can use the results of the project evaluations along with their expert knowledge of local road safety priorities and context to assess whether similar schemes could or should be implemented in their areas.

Demonstration projects

3 Since December 2001 the Department has funded four demonstration projects, working with 30 local highway authorities. To March 2009 these projects have received £34 million from the Department. None of these projects has related solely to pedestrians or cyclists but instead have addressed road safety more generally.

- **Mixed Priority Routes** (10 authorities). This project aims to show how to improve safety on roads that carry high traffic volumes, but also have many pedestrians, cyclists, bus passengers and school children.
- **Neighbourhood Road Safety Initiative** (15 authorities). The Department chose the participating authorities on the basis of their particularly severe child pedestrian casualties and their deprivation levels. It encouraged them to address road safety issues in partnership with other local bodies such as the fire and rescue service and the authorities' own children's services departments. We examined a scheme in Bury as part of this study.

- **Inner City Road Safety** (one authority). This project covered many of the same themes as the neighbourhood road safety initiative, but on a much larger scale focusing on disadvantaged areas in inner Birmingham.
- **Rural** (four authorities). The project is intended to demonstrate good practice for local highway authorities to reduce casualties on rural roads. While fewer people are injured, there are nearly twice as many fatalities as on urban roads.

Partnership grant scheme

4 The Road Safety Act 2006 gave the Department powers to pay road safety grants directly to local highway authorities. The Department announced that it was introducing an annual £4 million road safety partnership grant scheme open to bids from all local highway authorities in England in October 2006 using these new powers.

5 The Department intends to fund most of its future delivery and demonstration work using the partnership grant approach, which requires bidding local highway authorities to create partnerships with other local bodies such as police services, fire and rescue services or schools to deliver local road safety schemes. However, the Department may reduce the number of projects after the first three rounds have completed.

6 The Partnership Grant Scheme is currently running for three rounds. Each round runs for two financial years, but they start only one financial year apart meaning successive rounds overlap. In the first round 2007-09, 27 schemes were approved with total grant funding of £5.3 million. In the second round 2008-10, 19 schemes were approved with total grant funding of £2.2 million. The Department expects to award the 2009-11 round of bids in early 2009, and has estimated the awards over those two financial years to total approximately £7 million.

7 As the Department intends to use the partnership grant approach more widely within its road safety delivery work, we audited the administration process for the partnership grant scheme. We found that generally it worked well, with appropriate controls which staff operated effectively. We found that the process was efficient and could be used as a model for future road safety grant schemes if some minor issues relating to a lack of documentation were addressed.

Case examples

8 We chose five case examples to illustrate the Department's delivery work on the basis of: their road casualty records for pedestrians and cyclists; intervention type; user groups targeted; funding levels; and region. The five authorities were:

- Birmingham City Council;
- Brighton and Hove City Council;
- Bury Metropolitan Borough Council;
- Essex County Council; and
- Oldham Metropolitan Borough Council.

Case Example 1 – Birmingham City Council



Project name – Inner city road safety demonstration project

Funding from the Department – Demonstration project grant £6.0 million

Timing – April 2004 to March 2010

Intervention type – Engineering

Road users targeted – All

Why the project was proposed

In line with national research undertaken by the Department and others, Birmingham City Council found that in the more deprived areas of Birmingham, east of the City Centre, there have been a disproportionate number of road casualties, especially among pedestrians and children.

What the project aims to do

The Birmingham Inner City Road Safety Demonstration Project is a large, one-off demonstration project funded by the Department. It aims to demonstrate to other urban local highway authorities how an area-wide and partnership approach can reduce casualties in and bring wider benefits to disadvantaged urban areas. The aims of the project, which it will be evaluated against, are to:

- have a measurable impact on road safety in actual and perceived terms;
- integrate road safety activity into regeneration and other agendas and to building partnerships for delivery;
- secure engagement and participation with a diverse community, and influencing local views about road safety;
- improve accessibility to jobs, services and leisure opportunities; and
- improve quality of life making a safer, vibrant, more stable community.

How the project plans to achieve its aims

The project consists mainly of improvements to infrastructure, but the Council is also doing some education work, such as distributing leaflets and holding consultation events. The infrastructure improvements are focused on four areas within East Birmingham: Alum Rock Road; Coventry Road; Green Lane; and Ward End. There are also smaller improvements to the area as a whole. The improvements include: improving bus stops to make access easier; traffic calming measures; improving junctions and signals to make pedestrian and cyclist access safer; and improving footway surfaces.

Challenges and successes encountered

Birmingham City Council has encountered significant community and political pressures during the consultation and scheme approval stages of the design work. One difficulty is that often local citizens jump to a solution before considering all the options – for example, many said they wanted road humps installed, but when asked differently the underlying desire was for slower speeds in the local area so pedestrians would feel safer. Installing road humps was just one solution, which was not the most appropriate in some cases.

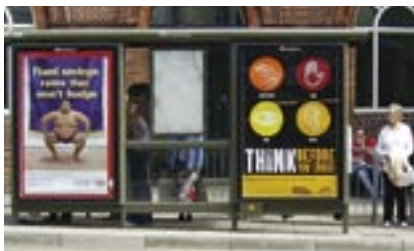
The Council has found that different ethnic groups perceive some dangerous road behaviours as safe. The Council can use this information to target its road safety messages better, for example, by distributing road safety education materials aimed specifically at these issues to these ethnic groups.

How the project will be evaluated

Consultants and academics will evaluate the project on behalf of the Department. The evaluation will use data on collision statistics, speed surveys, pedestrian flows, cycle flows and traffic flows, as well as possible socio-economic benefits. The focus of the evaluation is on the area-wide impacts and how partnership working has helped to achieve these. The Council told us that it relies on the Department for advice in formulating the specifications for its evaluations as it does not have the necessary expertise. The final report will use three years of collision data after the schemes' completion.

The Council wants this road safety project to demonstrate that there can be a successful balance between road safety and broader issues such as the impact on the local community and businesses and quality of life. The Council told us that local highway authorities will increasingly look to the Department for guidance on how this can be achieved, and the evaluation of this and other projects will be essential in forming that guidance.

Case Example 2 – Brighton & Hove City Council



Project name – The North Street Project

Funding from the Department – Partnership grant £771,000

Timing – April 2007 to March 2009

Intervention type – Engineering, education, training and publicity

Road users targeted – Pedestrians and bus passengers

Why the project was proposed

The Brighton & Hove City Council road safety team identified that the number of road deaths and injuries on the North Street route was unprecedented and rising, with one of the five areas seeing a increase of 50 per cent in four years. Three of the five areas were ranked in the top ten riskiest in Brighton, including the most risky junction in the city, where 51 people were injured from 2003 to 2006. The route also has rising bus and pedestrian traffic, and a disproportionate number of collisions involve buses and pedestrians.

What the project aimed to do

The main objective of the project was to reduce pedestrian casualties, in particular those involved in collisions with buses. Its success criteria are to deliver:

- a casualty reduction of 30 per cent;
- an identifiable effect on pedestrian behaviour; and
- an effective self-informing street environment.

How the project planned to achieve its aims

The project involved making a number of alterations to the layout of the route and the adjoining area, including widening pavements and moving or improving crossings. Following a research paper commissioned by the Council, the local bus company introduced minor design changes to buses, such as improved demisters and security screens to improve visibility generally and changing the colour and position of the wing mirrors since they were hitting some pedestrians at bus stops or on the footway. The Council also published a significant programme of education, training and publicity materials aimed at raising road safety awareness to reinforce the importance of looking in all directions before stepping off the pavement to cross the road and standing back from the kerb at bus stops. The overall aim was to encourage

good road safety habits and to influence the attitudes and behaviours that cause accidents. The Council created a partnership with other interested local groups to inform its work and obtain agreement that what it is doing will achieve its aims. Its partnership was with: the Brighton & Hove Bus Company; Sussex police; and community and traders groups.

The education, training and publicity programme is now complete. It included: posters in buses, at bus stops and on billboards; multi-media displays in the rail station and at the main shopping centre; printed messages on the back of bus tickets; printed “please stand back from the kerb” stickers for real time information signs at bus stops; and leaflets and worksheets distributed to foreign language schools and local school children. There have also been advertisements on local radio stations and articles in the local media. The City Council, like many local highway authorities, used the Department’s national road safety campaign branding – *Think!* – on their own, local road safety education and publicity materials for its high-recognition value.

Challenges and successes encountered

The alterations to the street layout are expected to be completed in August 2009, which is six months after the planned completion date. The Council has experienced difficulties liaising with local interested organisations such as utility companies, and the results of the public consultation meant that some elements had to be redesigned, for example, there were plans to close Ship Street at its junction with North Street to reduce traffic flows in North Street and eliminate accidents at this junction. In response to concerns raised by local businesses, residents and lead councillors, however, the plans were altered to one-way traffic southbound with a contra-flow cycle lane. The Council considers that this will still lead to a simplification of movements and a reduction in collisions.

How the project will be evaluated

The evaluation of the infrastructure improvements will use a variety of data. The project will monitor:

- collision data;
- traffic speeds;
- numbers of vehicles;
- pedestrian flows;
- observed pedestrian behaviours; and
- bus driver attitudes.

Collision data for up to three years after completion will be compared with the three years prior to construction, and this will be supplemented by collision reports from the bus company. Traffic speeds will be monitored after scheme completion with a target speed of 20 miles per hour along the route. Buses will be separately identified. No 'before' data was collected and so determining whether any speed reduction was due to the project will be difficult. Numbers of vehicles will be monitored throughout 2009 and the comparison will be with the last data available before the project began, but this is 2003 which may not provide a useful comparison. Pedestrian flows were surveyed on a weekday and a weekend day in February 2009 and will be again in July 2009 to be compared with a similar survey undertaken in 2006. Observed pedestrian behaviours will look for a 30 per cent reduction in pedestrians failing to look properly before they cross, when compared with a summer 2007 survey which looked at the same things. Focus groups of bus drivers after completion of the project will be used to understand their attitudes to the dangers of driving along the route and this will be compared with similar focus groups undertaken in August 2007 before the route had been modified. The team will look for a positive change in attitudes, although as this is qualitative data this might be difficult to assess robustly.

Various techniques have been used to develop and evaluate education, training and publicity measures. These include focus groups, observational studies, surveys, questionnaires and onsite interviews.

The evaluation of the poster campaign is now complete. It gave mixed results. A total of 789 people were observed crossing roads in three locations along the route where posters had been displayed. Seventy-two per cent of people observed used safe crossing behaviours, representing a nine per cent improvement over the baseline observations taken in Summer 2007. This improvement cannot be linked directly to the poster campaign, however. The proportion of people using safe crossing behaviours was lowest at the site which had most posters on display and just 29 per cent of people were aware of the road safety publicity posters when asked. Overall, the evaluation does not show any links between the poster campaign and changes in crossing behaviours or reductions in casualties. No conclusion can be drawn on the poster campaign's effectiveness. The City Council was not aware of the guidance the Department has published on how to evaluate publicity campaigns.

Case Example 3 – Bury Metropolitan Borough Council



Project name – Neighbourhood Road Safety Initiative

Funding from the Department – NRSI grant £300,000

Timing – February 2004 to March 2007

Intervention type – Engineering and education

Road users targeted – Pedestrians and child pedestrians

Why the project was proposed

Research carried out in the early 2000s found that child pedestrians in the most deprived areas were four to five times more likely to be injured in a road traffic collision than in the least deprived wards. This research prompted the Department to set an additional target for the period 2002-05 to reduce road casualties in areas of high deprivation at a faster rate than in other areas of England, and this project was one of the ways it intended to achieve this. Six of Bury's 16 wards suffered levels of child casualties in line with those found in the most deprived wards.

What the project aimed to do

The project was a four-year £17.6 million delivery project sponsored by the Department and involving 15 local highway authorities, including Bury. The overall aim was to improve road safety in areas of high deprivation. Specifically in Bury this focused on reducing child road casualties. The project also aimed to improve young children's lack of road awareness and encourage drivers to take more notice of pedestrians.

How the project tried to achieve its aims

Bury spent around £250,000 delivering infrastructure improvements such as: traffic calming in the School Street area; improvements to highway routes in a residential area susceptible to short cuts; and improvements to pedestrian routes to community facilities such as parks and playgrounds. Bury also spent a £50,000 regeneration

grant on the Take Care Get There project, which focused on driver attitudes and child road safety awareness. The project included road safety murals, theatre workshops and the creation of DVDs. Additionally, Bury introduced a mosque-marshalling scheme, with three paid marshals who were recruited and trained to escort children as they cross busy roads on their evening journeys from home to mosques.

Challenges and successes encountered

Bury had to overcome delays in the recruitment of the central Neighbourhood Road Safety Initiative support team. This delay arose as none of the participating councils had the capacity to accommodate the team. The Greater Manchester Police agreed to accommodate the team, but this meant that the recruitment process was protracted due to the more stringent police security checks. Through the project, Bury established and is maintaining partnerships with local bodies such as youth offenders' groups, Sure Start, the local regeneration board, and a wide range of other partners including local mosques. Bury is continuing to work with these partners and told us that it has benefited from a more informed local network than before the project started.

How the project was evaluated

The Department has published overall evaluations of the project which consider all schemes in all 15 participating authorities. These drew lessons from: the project management; individual schemes; and how to widen the reach of the lessons emerging.

For Bury specifically, the Council considers the 20 mph zone in the School Street area to be successful. In the three years before scheme implementation six personal injuries were recorded, five slight casualties and one serious involving four vehicle occupants, one pedestrian and one cyclist. In the 18 months following the scheme implementation one slight casualty to a vehicle occupant has been reported. While these are very small numbers and subject to random variation these figures are encouraging.

The improvements to pedestrian access routes were not evaluated.

The mosque-marshalling scheme is considered a success by the Council. While there are no figures for road injuries sustained on journeys to mosques before the scheme started, to date there have not been any reported injuries to child pedestrians participating in this scheme.

Case Example 4 – Essex County Council



Project name – Community Wheels

Funding from the Department – Partnership grant £205,000

Grant funding dates – April 2007 to March 2009

Intervention type – Education and enforcement

Road users targeted – Pedestrians within deprived areas; motorcyclists; car occupants' seatbelt use

Why the project was proposed

While Essex has shown success in reducing the numbers of pedestrians and cyclists killed or seriously injured (45 per cent and 40 per cent, respectively, in 2007 when compared with the 1994-98 period), analysis by the Council showed that a disproportionate number of collisions involving pedestrians and cyclists occurred in deprived wards. The Council was also keen to use the project to tackle the groups and behaviours responsible for the most serious casualties, those involving motorcyclists and seatbelt wearing and mobile phone use among drivers, particularly young drivers.

What the project aimed to do

The project aimed to deliver a large programme of education and training activities directed at people from communities most at risk. By doing this it hoped to reduce the number of people acting in dangerous ways, and thus reduce the number of road casualties sustained by people from these communities.

How the project planned to achieve its aims

The project funded a large vehicle which contains road safety education materials and other devices, such as a driving simulator, an active SMART board and can act as a mobile classroom. This vehicle travelled around the county to schools, community events and town centres and road safety workshops and other activities are delivered to people from deprived areas. The project also supported a number of targeted enforcement drives, with advertising telling the local public when and where the police will be and the vehicle is present as well to give further information to anyone who has been stopped. These enforcement drives were largely aimed at motorists rather than pedestrians or cyclists.

Challenges and successes encountered

Most of the difficulties encountered were administrative, such as delays to the procurement process of the vehicle. One significant success of the project was the Council and the local fire service's securing of funding for the vehicle beyond the end of the Department's funding, and the fire service has undertaken to replace the vehicle in 2014 so the work can continue beyond that.

How the project will be evaluated

The evaluation of the project is relatively small-scale and involves focus groups and post-lesson questionnaires of some groups of individuals to whom training has been given. This work collects data on these individuals' attitudes and what they report their behaviours to be and any changes in these attitudes or behaviours as a result of the education and training they have been given. Another measure the Council is using to assess the success of the project is the number of days of training delivered. The Council told us that they found the pre-intervention benchmarking the most difficult part of the evaluation to compile as it had to take place in advance of much of the detail of the projects having been finalised.

Case Example 5 – Oldham Metropolitan Borough Council



Project name – 3 'til 7

Funding from the Department – Partnership grant £330,000

Grant funding dates – April 2007 to March 2009

Intervention type – Education and training

Road users targeted – Child pedestrians

Why the project was proposed

While examining sites where children sustained injuries due to road accidents, Oldham found that 62 per cent of child pedestrian accidents occurred between the hours of 15:00 and 19:00. Also, around 80 per cent of children killed or seriously injured were pedestrians, compared with the national average of 61 per cent.

What the project aimed to do

The project aimed to deliver a wide range of education, training and publicity work aimed at improving both children's pedestrian skills and those of their parents or guardians.

How the project planned to achieve its aims

The core of the project was classroom work and practical demonstrations for students, aged 5 to 11. This classroom and practical demonstration work built on the principles of an earlier national initiative known as Kerbcraft, which teaches children how to be safe pedestrians.

The practical demonstrations in this project included visits to sites where accidents involving child pedestrians have occurred, encouraging the students to investigate and discover the causes with the aim of making them more aware of the specific dangers of the road environment that affect child pedestrians.

There were numerous ancillary activities delivered:

- Seminars for parents and grandparents. The seminars aimed to improve the road safety awareness of those who look after children. The primary benefit was to help those who look after children supervise them better on the roads. Secondary benefits include road safety awareness for parents and grandparents to help them stay safe, and if they display safe behaviours children will learn from this as well.

- Road safety plays and workshops performed in local youth centres and secondary schools. These aimed to deliver road safety messages in new ways that are accessible for young people.
- Community involvement projects such as mosque-marshalling schemes where volunteers guide children safely to places of worship in the evenings (see Case Example 1 for more details).
- Borough-wide publicity including adverts on buses.

Challenges and successes encountered

During the early phases of the project when the team was investigating the problem, they wanted to plot the home locations of child pedestrian casualties to see if there were any patterns. They found that many of the postcodes recorded in the casualty data were inaccurate. To overcome this they went to the police records archive and looked at the data in more detail to look at the addresses recorded to get a better picture of where child pedestrian casualties lived, and more information on precisely what went wrong in each accident.

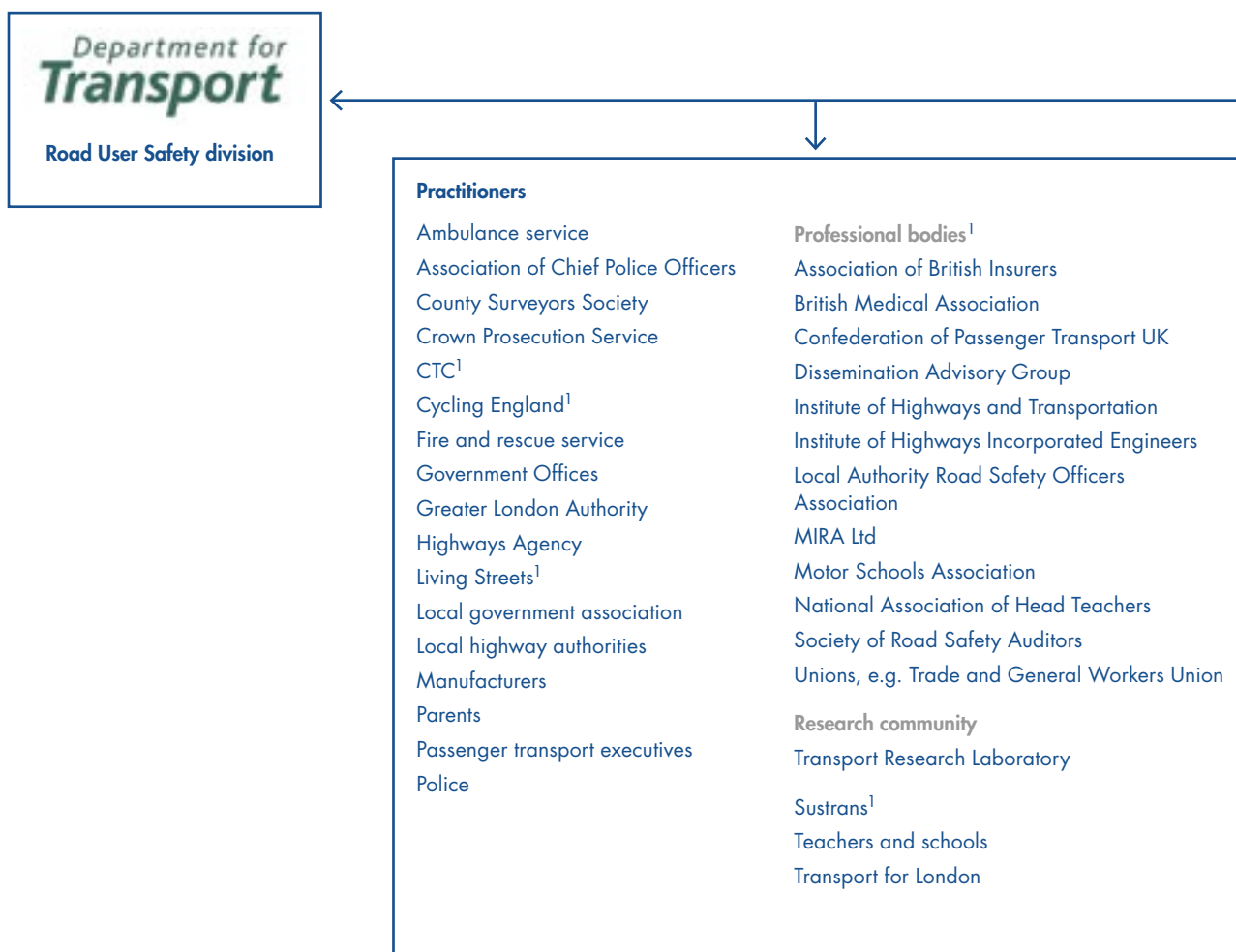
How the project will be evaluated

Oldham is currently evaluating the project mainly on the basis of surveys of attitudes and family groups of children who have taken part in the activities. One particular element involves gathering data on families in four areas which have had significant numbers of child pedestrian casualties. All of the activities have some form of evaluation but Oldham acknowledges that some evaluations will not be as robust as they could be. Oldham will submit its evaluation report in July 2009, three months after the project was completed.

APPENDIX FIVE

Groups interested in pedestrian and cyclist road safety

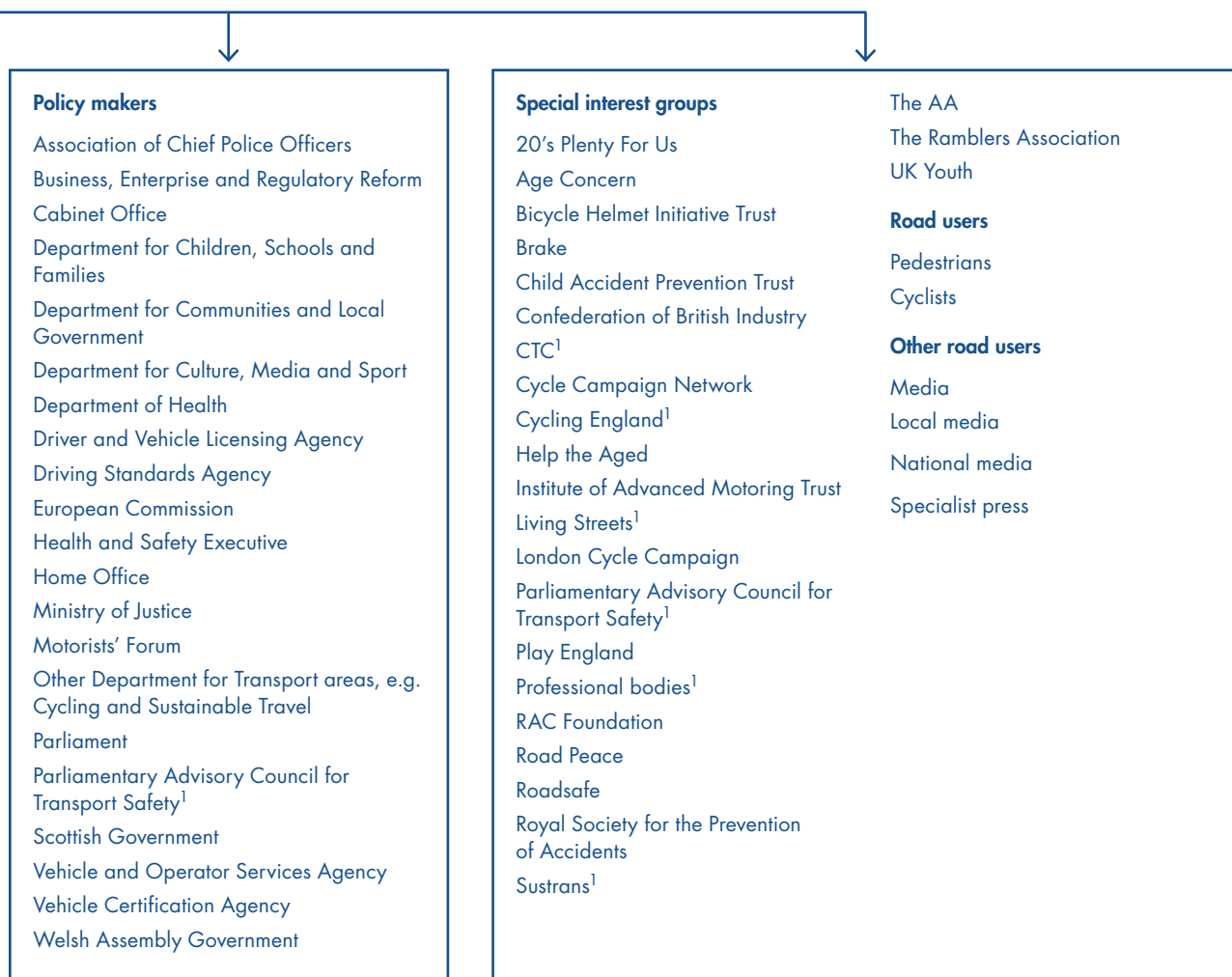
18 Groups interested in pedestrian and cyclist road safety



Source: National Audit Office

NOTE

¹ Organisations may appear in more than one category.



APPENDIX SIX

Road Safety Delivery Board

BOX 2

The role of the road safety delivery board

The second three-year review of the Government's road safety strategy, *Tomorrow's Roads: Safer for Everyone*, committed to the establishment of a Road Safety Delivery Board. The Delivery Board met for the first time in March 2008, and agreed the following Terms of Reference:

The Delivery Board is responsible for improving the delivery of the casualty reduction objective by their respective agencies, by:

- identifying the best performers, how they achieve their results and exporting this to others;
- identifying problems and obstacles and driving through the solutions; and
- making connections between agencies and fostering better partnership working.

The Board's focus is on delivery on the ground with a view to ensuring that the Department meets the targets set in the 2000 Strategy.

Membership of the road safety delivery board

The board's membership includes:

- central government departments, including the Department for Transport and the Home Office;
- Department for Transport agencies, including the Highways Agency and the Driving Standards Agency;
- Association of Chief Police Officers;
- Transport Wales;
- Chief Fire Officers Association;
- Department of the Environment Northern Ireland;
- Scottish Enterprise & Life Long Learning;
- County Surveyors Society; and
- Local Authority Road Safety Officers Association.

APPENDIX SEVEN

Written Consultation

Organisations contacted in writing

1 We contacted senior officials in 19 organisations with an interest in road safety issues affecting pedestrians and cyclists. The organisations comprised a broad cross section of bodies including motoring and other commercial organisations, charities and special interest groups. The information they provided helped to inform the issues that we examined during, for example, interviews with Departmental and other officials and case example investigations.

Responses to the consultation

2 Eleven organisations (out of 19) responded to our consultation: equivalent to a response rate of 58 per cent.

Main points arising from the consultation

3 Several organisations said that they would welcome more opportunity to increase their involvement in helping to develop and implement road safety schemes and policy. They stated that the Department would best improve its

support to them by increasing its level of engagement with them. This might take the form of wider-reaching and longer consultations.

4 The respondents were generally active in promoting road safety without the Department's direct input, with four stating that they had worked on road safety schemes not directly involving the Department, including local campaigns and delivery of training to young drivers. Four of the respondents had, however, received some funding from the Department in the last five years, and they considered that the financial support arrangements worked well and that Departmental staff were helpful.

5 Most respondents offered suggestions for how the Department could improve road safety for pedestrians and cyclists though, given the range of different interests represented by the respondents, there were no common themes. Examples²⁰ of specific improvements that the Department should consider, some of which have previously been addressed by the Government, included:

- improve the speed awareness elements of driver training;
- introduce a mutual respect campaign for all road users to ensure the protection of the most vulnerable;
- increase public awareness of cyclists on the road;
- eradicate all motor vehicles' blind spots;
- promote the adoption of 20 miles per hour speed limits on all urban roads, including by clarifying guidance to local highway authorities and relaxing regulations governing their introduction;
- address more road safety initiatives at particular sections of the population, for example older people; and
- consult with pedestrians with special needs and their representatives over the risks associated with the wider introduction of shared surfaces, where the kerb between the pavement and road is removed.

Organisations that responded to our consultation

20's Plenty For Us
British Cycling
Cyclenation (formerly the Cycle Campaign Network)
Help the Aged
RoadPeace
The Automobile Association
The Institute of Advanced Motoring Trust
The Institute of Highways Incorporated Engineers
The Royal National Institute for Deaf People
UK Roads Board
UK Youth

²⁰ Please note that not all of the organisations support these measures.

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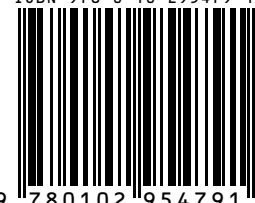
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