



National Audit Office

**DEPARTMENT FOR TRANSPORT**  
Improving road safety for pedestrians  
and cyclists in Great Britain

LONDON: The Stationery Office  
£14.35

Ordered by the  
House of Commons  
to be printed on 6 May 2009



# 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.