PROMOTING THE MOBILITY OF VULNERABLE ROAD USERS

M. CARTER
Director of the Accessibility & Equalities Unit
Department for Transport, United Kingdom
miranda.carter@dft.gsi.gov.uk

INTRODUCTION

The UK Government's aim is a transport system that works for everyone, including the most vulnerable of our road users, i.e. pedestrians, cyclists, motorcyclists and disabled people.

The UK Government's aim is to cut the number of deaths and serious injuries from road accidents by 40 per cent overall and by 50 per cent for children between 2000 and 2010.

1. VULNERABLE ROAD USERS

Safety has improved for vulnerable road users since 1994-98. In 2005 the number of pedestrians killed or seriously injured was down 39% and the number of pedal cyclists killed or seriously injured was down 37% compared with the 1994-98 baseline.

However, cyclist fatalities rose by 10% in 2005 compared with 2004 and the number of cyclists seriously injured was 2% higher than 2004. The numbers of children killed or seriously injured as vulnerable road users was also down in 2005 compared with the baseline – for child pedestrians, down 49% and for child cyclists, down 53%.

Motorcyclists are our most vulnerable road users. They consist of 1% of overall traffic, but nearly 20% of fatal and serious injuries.

2. MOTORCYCLISTS

In February 2005 the UK Government published the first fully fledged National Motorcycling Strategy. This was developed with the full involvement of motorcycling groups representing the views of the industry and of users, through the Advisory Group on Motorcycling.

The strategy recognises that an increasing number of people are turning to motorcycles and scooters in order to beat congestion as well as riding bikes just for the sheer fun of it.

A principal aim of the strategy is to mainstream motorcycling - so that all organisations involved in the development and implementation of transport policy recognise that motorcycling can be a modern, practical way of getting around.

To this end, the strategy sets out a framework for action over the next few years. Many of these actions are for central Government to implement; some are for Local Government; others are for stakeholders such as the manufacturers, retailers and user groups to pursue.

We are now working with these groups on implementing the strategy. This is being taken forward by the National Motorcycle Council (NMC), which is led by the industry and includes representatives of the user groups, manufacturing, retail and training industries and local government as well as the DfT.

Four NMC working groups have been set up to oversee the implementation the Strategy actions. These are:

- Technical, Engineering & Environment Issues
- Training, Testing & Licensing
- Traffic Management, Planning & Transport Policy
- Road Safety & Publicity

In January 2006, DfT launched a new advertising campaign, reminding car drivers to "take longer to look for bikes". Many motorcycle accidents are collisions with cars at junctions and driver inattention is a contributory factor in many of those cases. The new TV advert shows how easily such accidents can occur and is supported by a radio advert and a poster campaign.

3. VULNERABLE CHILDREN

We are making good progress towards our target to reduce child fatal and serious injuries by 50% by 2010. However, there is still more work to be done, both to build on that success and also to address areas within the target where we have made less progress. Priority issues include:-

- Teenagers, where casualty reductions have been half that for younger children;
- Most child casualties are boys;
- Over 60% of child fatal and serious injuries are to pedestrians;
- Disadvantaged areas are still a priority. While the target to achieve a greater casualty reduction in these areas by 2005 has been met, they are still a focus of our activity;
- Children in different social and ethnic groups and in urban and rural areas have different circumstances that must be taken into consideration;
- Car drivers and other road users also have a responsibility for child road safety.

The UK Government's new child strategy sets out an action plan of measures to help reduce child casualties further between now and 2010 - including some that are new and some that are continuing or developing existing measures. The main priorities for new or additional efforts are:-

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

4. SAFER CYCLING

Our strategy to improve the safety of cyclists is both to improve conditions for cyclists and to encourage them to protect themselves. This includes persuading cyclists to wear helmets. Helmets can reduce the incidence and severity of head, brain and upper facial injuries, particularly for children. We also encourage cyclists to make themselves more visible to other road users, and to get cycle training to improve their skills.

We concentrate our publicity on teenage and child cyclists, as they are the most vulnerable group.

Research has shown cycle training to have a lasting positive effect on safety. The Department for Transport has established a new National Standard for cycle training with more than 20 road safety bodies. In 2005 Cycling England was formed as the UK Government's new advisory body on cycling.

In 2006 Cycling England's budget was doubled with an extra £5m per year over the next three years, specifically for child cycle training and providing more safe cycle links to schools, with a focus on deprived areas

4.1. Cycle Facilities

Well designed cycle facilities can make a cyclist's journey safer, quicker and more convenient. Such facilities are also used to encourage an increase in cycling.

4.2. Cycle Lanes

There are two basic types of cycle lanes - mandatory and advisory. Mandatory cycle lanes are marked with a solid white line and, during their hours of operation, motor vehicles are excluded from them. Advisory cycle lanes are marked with a broken white line. Motor vehicles are allowed to encroach upon them although, as the name implies, drivers are advised to avoid them in general.

They are often introduced to provide a degree of separation between cyclists and motorists, but where they are used on the approach to a congested, signalised junction, their main purpose is to help ensure that there is sufficient room for cyclists to pass on the inside of stationary motor vehicles queuing at a red stop light.

Contraflow cycle lanes allow cyclists to travel against the general flow in a one-way street. This facility is useful where there is no convenient alternative route for cyclists. Contraflow cycle lanes can save cyclists from having to make a long detour along what might be a heavily trafficked road.

4.3. Cycle Routes

Off-road cycle routes often form part of a local authority's local cycling network, sometimes linking to the National Cycle Network. All local authorities are encouraged to develop local cycle networks as part of their cycling strategy within their Local Transport Plans by which the Department for Transport funds their transport programme.

4.4. Advanced Stop Lines (ASLs).

ASLs were first introduced in the late 1980s as a means of allowing cyclists to position themselves ahead of stationary motor vehicles waiting at signal controlled junctions. They make cyclists more visible in these situations, and reduce the likelihood of conflict with motor vehicle movements when the signals change to green. They also allow cyclists to wait at the signals ahead of engine exhaust outlets.

Another useful facility for cyclists is to allow them to use areas where motor vehicles are prohibited, such as in pedestrian areas.

4.5. Educating Drivers

Educating drivers is an important element in making cycling safer. The Highway Code includes a section for drivers on road users requiring extra care, including cyclists. To make them more aware of the needs of cyclists, the theory test question bank contains a large number of questions about them and other vulnerable road users. The screen-based theory test allows the use of digitised video clips to help test hazard perception with moving images, which include cyclists.

5. PEDESTRIAN CROSSINGS

5.1. Puffin Crossing

The Puffin (Pedestrian User-Friendly INtelligent) crossing is a new type of signal controlled facility developed by the Department for Transport. It can be installed at most pedestrian crossing sites, either to replace existing crossings, or as a new pedestrian crossing.

The Puffin uses detection systems to control the crossing period and detect pedestrians in the waiting area. Slow moving pedestrians are given longer time to cross if they need it and lights will change back to green sooner for drivers if pedestrians cross quickly. Drivers will not be stopped if pedestrians cross in a gap in the traffic before the signals change.

The Puffin crossing pedestrian signal is mounted at the near-side of the road. This allows pedestrians to watch the traffic and the pedestrian signal simultaneously. The position of the near side signal is also helpful to visually impaired pedestrians who may not clearly discern signals mounted at the far side of the road.

5.2. Toucan Crossing

The Department has also developed an unsegregated signal controlled crossing for pedestrians and cyclists, linking cycle track and footway systems on opposite sides of a carriageway. This crossing is called a Toucan (as two can cross).

The Toucan Crossing has the same form of vehicular and detection as a Puffin crossing and normally the same form of pedestrian on-crossing detectors. Some crossings also use kerb side detection as well. There are currently two methods of operation; one is similar to existing far side facilities and the other similar to nearside facility used at A Puffin crossing. It is intended that in the future most Toucan crossings will use the similar method of control as used at Puffin crossings.

6. ACCESS FOR DISABLED PEOPLE TO THE PEDESTRIAN ENVIRONMENT

The UK Government is committed to comprehensive civil rights for disabled people. An integrated transport policy, which encompasses accessible public transport, public transport infrastructure and a barrier-free pedestrian environment, is fundamentally important to delivering that commitment.

Part III of the Disability Discrimination Act 1995 (DDA) gives disabled people a right of access to goods, facilities, services and premises. Since 1996, it has been unlawful for service providers to treat disabled people less favourably than other people for a reason related to their disability.

These requirements apply to facilities and services in the pedestrian environment and in transport related infrastructure. Transport vehicles are covered by separate provisions under Part V of the DDA.

The “Inclusive Mobility” guidance document was published to aid service providers, such as local authorities, meet their requirements under Part III of the DDA. It provides guidance on established best practice on access for disabled people to the pedestrian and transport environment.

This guidance provides advice on, for example, pavement widths; gradients; fences and guardrails; ramps and step; dropped kerbs and raised crossings; tactile paving surfaces and colour contrast.

Although the main purpose of these guidelines is to provide good access for disabled people, designs that satisfy their requirements also meet the needs of many other road users, such as those who are travelling with small children in pushchairs; those carrying luggage or heavy shopping; those with temporary mobility problems (e.g. legs in plaster); and many older people.

7. VISUALLY IMPAIRED PEDESTRIANS AND TACTILE PAVING SURFACES

Tactile paving surfaces can be used to convey important information to visually impaired pedestrians about their environment, for example, hazard warning, directional guidance, or the presence of an amenity. Research has determined that visually impaired people can reliably detect, distinguish and remember a limited number of different tactile paving surfaces and the distinct meanings assigned to them.

The Department for Transport has issued a national advice document “Guidance on the Use of Tactile Paving Surfaces” first published in 1991.

The use of blister paving as a warning device at controlled and uncontrolled pedestrian crossing points is now well established in the UK. The guidance document on tactile paving gives advice on the use of a number of additional types of tactile surface to give warning of potential hazards, such as; top and bottom of stairs; platform edges and for amenity purposes to give guidance and information.

Recognising that the needs of people with physical and sensory disabilities could create potential conflicts, the research which led to the development of the tactile paving surfaces

involved not only the target group, i.e. visually impaired people, but also others with a wide range of other disabilities including wheelchair users and people with walking difficulties. Each type of tactile paving surface should be exclusively reserved for its intended use and consistently installed in accordance with the published guidelines. Visually impaired people are becoming increasingly mobile, both within their local area and more widely, and it is, therefore, very important that conflicting and confusing information is not conveyed.

8. MANUAL FOR STREETS (MfS)

Major new guidance on designing residential streets, the “Manual for Streets”, was published on 29 March 2007.

The guidance seeks to improve the design of residential streets by promoting designs that create more people-orientated streets.

It aims to increase the quality of life in residential streets through good design, and by placing a greater emphasis on the needs of pedestrians and cyclists.

The intention is to reduce the dominance of motor vehicles and create streets which are attractive places in their own right rather than simply as conduits for the movement of traffic.

We also want to make streets more accessible for disabled people, including those who are blind or partially sighted. Such inclusive design is a prime consideration.

The Manual advocates street designs which encourage motorists to travel at an appropriate speed for the conditions.

The guidance is directed to all those with a part to play in the planning, design, approval or adoption of new residential streets, and modifications to existing residential streets.

The guidance is less prescriptive than its predecessor documents. The intention is to encourage designers and planners to adopt a more creative approach - to think about what they are doing, rather than simply using numbers from a table. Standard design solutions are discouraged and the manual stresses the importance of quality.

It promotes collaboration amongst the different disciplines involved in residential development or improvement schemes. The Manual encourages adopting this approach early in a project's life - this helps practitioners avoid problems which can be difficult to overcome if they only become apparent in the later stages.