

Government White Paper:

Creating Growth, Cutting Carbon

Making Sustainable Local Transport Happen

January 2011

**Response to traffic signing issues
from Institute of Highway Engineers
to the Secretary of State for Transport**

This document is the response of the Institute of Highway Engineers (IHE) to the issues affecting traffic signing contained in the above White Paper.

IHE Comments

We welcome the Government's commitment to sustainable travel and reducing carbon emissions caused by local transport. However, we have specific comments for the Secretary of State to consider on both sign illumination and route numbering.

Where responsibility is devolved to individual authorities to make safety-critical decisions relating to traffic signing, staff need to have received the necessary training and preferably to have acquired a relevant qualification, such as this Institute's Professional Certificate in Traffic Sign Design, developed with the support of your Department. Appropriate training is particularly difficult to achieve in smaller authorities where those involved generally have many areas of expertise to keep abreast of relating to their wide range of responsibilities.

Sign illumination

The IHE welcomes the expected outcomes of the DfT Traffic Signs Policy Review. You will be aware that the Institute and its members have been contributing to the review at Steering Group and Working Group meetings and by providing detailed reports and responses. Nevertheless, we remain concerned that proposals to relax the requirements for direct illumination of certain signs have been made in response to environmental concerns without adequate consideration of the road safety and traffic engineering consequences. Paragraph 7.17 of the White Paper states:

7.17 The review will also provide measures to help to improve the environment. The Department for Transport will provide new advice on auditing and removing unnecessary traffic signs. This advice will enable authorities to deliver improvements to their streetscape and reduce their maintenance costs. The review will also reduce the regulatory requirement for highway authorities to directly illuminate some of their traffic signs. The carbon footprint of an illuminated traffic sign is significantly higher than the reflective alternative.

The implication that reflective signs are simply an alternative to direct illumination and that their performance is similar, is particularly worrying. Whilst retroreflective signs perform an excellent job in many situations, several detailed studies, including those commissioned by TfL, Highways Agency and DfT, have all concluded that there are still many places where they are not suitable.

Retroreflective signs only work if they receive enough light from the direction of the driver. Even if drivers in lit areas use dipped headlamps, these studies have shown not enough of that light reaches signs in many positions. Drivers of heavy goods vehicles are particularly disadvantaged if sign illumination is removed, due to the wider spacing between their headlamps and the driver's eyes.

Traffic signs are placed for a reason. If it is not essential for a sign to be seen at night, then presumably neither is its visibility essential during daylight hours, and it should therefore be removed under the White Paper's excellent de-cluttering proposals. If a sign is essential, then it needs to be capable of being seen by all drivers at all times.

The carbon footprint and maintenance costs of illuminated traffic signs have been based upon conventional lighting units. The savings achieved by dispensing with illumination have therefore been exaggerated, as LED and electroluminescent technology now being used shows a dramatic reduction in both energy usage and maintenance cost over conventional direct lighting. The energy reduction is such that sign illumination can often be powered by a solar panel alone, making the sign 'zero carbon' and eliminating the need for a connection to the mains supply.

The 2002 Traffic Signs Regulations and General Directions introduced considerable flexibility. Highway authorities can choose whether to directly illuminate or reflectorise many types of sign in lit areas. There may be additional signs that could benefit from this enhanced flexibility, particularly low-mounted signs such as bollards, but we believe that a wider or general relaxation of the requirement to light regulatory and warnings signs, in particular, would lead to major disbenefits such as increasing road casualties and problems with enforcement.

Route numbering

Routes numbers, as displayed on traffic signs, printed on maps and road atlases and incorporated into navigation devices are a valuable aid to the road user to guide them efficiently through the network. The current road numbering system in UK is one of the best in the world; it is uniform, universal and in widespread use. It doubtless saves many millions of vehicle miles that would otherwise occur due to people getting lost or not following the best route. Such wasted miles would contribute to increased carbon emissions and more road collisions. We are therefore concerned at the proposal at paragraph 7.23 of the White Paper:

Classification of local roads

7.23 The Department still holds responsibility for classifying every road in England as an A road, a B road or a minor road. Local authorities are clearly best placed to make decisions here. In addition, the difficulty of changing the classification of a road has meant that local authorities have created their own parallel systems for organising their roads, which are not visible to the public. The Department will therefore give local authorities the responsibility for classification in their area; they can adjust the status of local roads to better match their real-life priorities and local communities will have a better idea of where and why councils are directing their resources and focus.

The White Paper does not make clear whether local authorities will gain powers simply to decide on the classification status of each road in their network, or whether they will also be responsible for the allocation of route numbers within their area. In either case, we think that this proposal could be severely detrimental to the efficient use of the road network. We believe that it could result in routes changing their numbers and status as they crossed authority boundaries (possibly several times along a long distance route), inconsistencies developing between route numbers on traffic signs with those in road atlases and computer navigation systems, and duplication of numbers in different authorities. Such discontinuities would make the road network more difficult to navigate and would result in greater wasted mileage.

We believe it is right for authorities to be able to decide the status of roads which they control (subject to maintenance of status for routes crossing authority boundaries), but that it is essential to have a central 'clearing house' for route numbering, as this is the only way to ensure consistency, avoid duplication and provide efficient communication of numbering changes to Ordnance Survey and other makers of maps, road atlases and data for route navigation. The DfT is the obvious choice for such a clearing house, and should have the final say in any dispute between authorities and in determining the extent of the primary route network.