Traffic management in historic areas

Introduction

This leaflet highlights how traffic engineering and highway improvements can be designed sensitively in historic areas.

England and Wales have almost 8,500 designated conservation areas where local authorities have a statutory duty to "preserve or enhance the character or appearance of the area", and some 517,000 listed buildings where local authorities must "have special regard for the desirability of preserving the listed building or its setting". In England Planning Policy Guidance Note 15 "Planning and the Historic Environment" (PPG15) sets out detailed policies on historic buildings and conservation areas, and offers specific advice on reconciling transport and townscape issues. It recommends that highway authorities "should reflect the need to protect the historic environment..... through the more detailed aspects of road building and road maintenance, such as the quality of street furniture and road surfaces".

There has been growing interest in the use of traffic engineering techniques, particularly traffic calming, to reduce vehicle speeds, address accident problems and improve environmental quality.

However, streetworks and highway improvements can also have a dramatic impact on the visual appearance of historic areas. In order to meet transport, planning and environmental objectives, such works are therefore most appropriately carried out as part of an integrated approach to management of the townscape, and within the context of a traffic management strategy for the wider area.

This leaflet gives a wider setting to the more detailed advice issued in other Traffic Advisory Leaflets. There are no standard solutions for historic areas. Some features or particular designs of features may be less appropriate in conservation areas and other sensitive locations.

A prime consideration will be whether the physical measures preserve or enhance the character or appearance of the historic area, while meeting operational and safety requirements. Instrumental in this is an approach which advocates simplicity of design, and the use of materials which match - rather than contrast with - their surroundings.

Analysis

The design of a scheme in an historic area can be aided by an understanding of what has existed historically and what still survives. This can involve archival research, particularly of early photographs and engravings, townscape analysis and an audit of the area noting the materials used and their details. From this the special character of the area can be defined. An appreciation of the wider surroundings of the scheme area, and the relationship of buildings and the spaces between them, can also be of assistance.
Historical precedent can inform the method, design and choice of materials selected for new traffic management schemes.

**Footways and carriageways**

Historic areas can often be improved by the partial or total removal of traffic, through pedestrianisation or the use of shared surfaces.

However, in historic areas the traditional form and appearance of the street remains important. The traditional distinction between the carriageway and the footway may be important both visually and historically, and this may counsel against the adoption of a single wall-to-wall surfacing. An informed analysis of the existing situation will show whether traditional kerb lines and changes in level should be retained.

The resulting scheme can often help in generating a sense of civic pride and ownership in the scheme.

**Materials**

Historically, local materials were used for paving, such as granite in Cornwall and sandstone in Yorkshire. However, improvements in transport in the 18th century saw, for instance, Purbeck limestone used in the City of London: with the advent of railways in the 19th century, the use of Yorkstone became widespread.

Where historical materials survive these should be retained wherever possible, and natural materials used in new works. This is drawn in the advice contained within PPG15. Traditional materials are most appropriately used in combination with traditional detailing. Artificial paving materials have been developed which look like stone or brick. In many historic places, street surfaces were once little more than rammed earth and rubble and it is worth considering the use of a bound macadam as a natural successor, with an appropriate aggregate surface dressing.

The scale and layout of materials also need to be considered. The visual impression of a scheme can sometimes be improved with the incorporation of public art or planting. Features such as the introduction of patterns into paving schemes, however, are rarely based on tradition, and a useful rule-of-thumb is to restrict formal patterns to formal areas. In any places there has been a long-established tradition of interlocking rectangular 3’x2’ slabs for footways, and this should normally be continued.

A few principals can be applied broadly:

- develop an understanding of the special qualities of the place and depart as little as possible from the traditional form of the streets and their materials;
- respect existing or established traditional materials and detailing;
- review existing signing and consider scope for rationalisation;
- anticipate and minimise new signing requirements at the earliest design stage;
- limit formal design to formal spaces;
- provide for maintenance and invest in quality.
Signing and street furniture

In the past, many planned streets were characterised by a pervading sense of visual order. Modern usage of streets has demanded an increasing provision of street furniture including seats, litter bins, traffic signs, guard rails and bollards, sometimes at the expense of visual order. Recent work by the Civic Trust and the English Historic Towns Forum shows some useful ways to reduce clutter and integrate street furniture into the wider townscape.

Changes in layout or level may be suitable alternatives to ranks of bollards where these would be unsightly. Where bollards are used these should be in keeping with the character of the area: for example, square oak posts may be more appropriate in some settings than cast-iron.

Some modern street furniture uses historical styles. While there is certainly a role for reproductions, particularly where locally distinctive designs are used, there is also a place for modern designs to give continuity to a tradition of craftsmanship. An audit of existing traffic signs, with a view to rationalisation and maintenance, can be a useful way of improving the effectiveness of signs as well as removing clutter.

Narrower yellow lines can be used in conservation areas for the control of parking. A paler colour may also be used. In some areas, however, any yellow lines could be regarded as intrusive. Where waiting restrictions are uniform, and traffic conditions suitable, the designation of a restricted zone can obviate the need for yellow lines. Such an initiative would require signs authorisation from the Department of Transport: this would be given initially for an experimental period, and only where cooperation regarding the enforcement of the restrictions was assured.

Lighting

The almost universal illumination of built-up areas is a relatively recent phenomenon. The problem in historic areas is that, if light levels which ensure safety and security are to be achieved, the light sources must either be higher (to give a wider spread), or more frequent, than the traditional lamp-post.

A review of light coverage requirements can take into account the need for security and whether a contribution may be made from other sources such as illumination from buildings. Modern, discreet wall-mounted fittings may be more effective than reproduced cast-iron columns. The use of light fittings designed to aim light downwards and so reduce "light pollution" is worthy of consideration.

Colour can also play a valuable role. Changing from orange low pressure sodium lighting to white high pressure sodium or tungsten can be a simple enhancement.

Access

The access needs of all road users should be considered from the outset in scheme design. Cobbles or uneven setts can cause discomfort to some road users such as people in wheelchairs, or those pushing prams. While this may be inevitable in some parts of historic
towns, much can be done through good maintenance and special provisions.

Dropped kerbs combined with tactile surfaces at pedestrian crossing points, will assist mobility impaired, blind and partially sighted pedestrians. It is accepted that in historic areas some colour contrasts may not be considered acceptable: buff or grey materials can therefore be used as appropriate, rather than pink. It is now possible to provide tactile paving in Yorkstone. It is important to give careful thought to the design of crossing points to avoid the tactile surfaces forming awkward geometrical shapes, which can detract from the appearance of historic streets.

Bollards can be an obstacle, particularly for visually impaired people. To minimise the risks for pedestrians, where bollards are installed it is recommended that they are 1m high with a distinguishing colour at the top.

Traffic calming

A number of features can be employed to control vehicle speeds. Care will need to be taken in historic areas to ensure that the design of schemes incorporating these features does not diminish the visual amenity or character of the area.

Some historic areas already include townscape features which can have a natural traffic calming effect. These might include tight kerb radii, narrow carriageways, cobbled and setted streets, and traditional gateways or pinchpoints.

Entry treatments and gateways could be based on appropriate local townscape features, producing a wide variety of designs. Speed cushions can provide a less obtrusive alternative to humps, where these are constructed using materials and colours sympathetic with the highway surface and surrounding environment.

Road humps and other traffic calming devices must conform with the Highways (Road Humps) Regulations 1990 and the Highways (Traffic Calming) Regulations 1993, or else special authorisation should be sought from the Department of Transport. Any application should explain fully why it is not possible to meet the requirements of the regulations.

Where a road is subject to a 20mph speed limit the normal requirements for the signing and illumination of road humps and traffic calming works do not apply.

The Highways (Road Humps) Regulations are currently under review.

Costs

The cost of high quality materials may often seem prohibitive. However, an assessment should consider the durability of many natural materials and the benefit to the local economy of quality schemes in town centres. There may also be some saving on maintenance with a well-detailed scheme. There can be a case for combining low cost materials for extensive surfaces with the fine detailing of granite kerbs, setted gutters and stone-paved footways to make effective use of the resources available.
Further Research

The DOT and English Heritage are both collaborating on the Historic Core Zones project, which is being led by the English Historic Towns Forum. The aim of this project is to progress pilot schemes to determine appropriate and effective traffic measures for use in areas with special historic character.

Advice and enquiries

Advice on conservation aspects of streetworks can be obtained from local authority Conservation Officers. The regional Historic Areas Advisers at English Heritage are able to comment upon specific proposals, while local history societies and public libraries are useful sources of historical information.

Advice from English Heritage on any of the topics addressed in this leaflet can be obtained from:

English Heritage, 23 Savile Row, London W1X 1AB. Tel: 0171-973 3771

Professional and technical queries on traffic management and traffic calming issues should be addressed to:

Driver Information and Traffic Management Division, Department of Transport, Zone 3/24, Great Minster House, 76 Marsham Street, London SW1P 4DR. Tel: 0171-271 5184

Applications for 20mph speed limits, special authorisation of road humps or signs authorisations should be addressed to the appropriate Government Office for each region.

Welsh Office enquiries

In Wales comment on specific proposals may be sought from Cadw: Welsh Historic Monuments, an executive agency of the Welsh Office. Cadw carries out duties in respect of ancient monuments and buildings of historic interest in Wales on behalf of the Secretary of State for Wales.

References

Highways Act 1990
Traffic Calming Act 1992
Highways (Road Humps) Regulations (SI 1990/703)
Highways (Traffic Calming) Regulations (SI 1993/1849)

Planning Policy Guidance Note 15: Planning and the Historic Environment - 1994
English Heritage: Street Improvements in Historic Areas - 1993
English Heritage: Conservation Area Practice - 1995
Civic Trust/English Historic Towns Forum: Traffic Measures in Historic Towns - 1993
English Historic Towns Forum: Traffic in Historic Town Centres - 1994
Road Lighting and the Environment - DOT 1993

Traffic Advisory Leaflet 7/91: 20mph Speed Limit Zones
Traffic Advisory Leaflet 2/93: 20mph Speed Limit Zones Signs
Traffic Advisory Leaflet 3/93: Traffic Calming Special Authorisation
Traffic Advisory Leaflet 7/93: Traffic Calming Regulations
Traffic Advisory Leaflet 11/93: Rumble Devices
Traffic Advisory Leaflet 12/93: Overrun Areas
Traffic Advisory Leaflet 13/93: Gateways
Traffic Advisory Leaflet 2/94: Entry Treatments
Traffic Advisory Leaflet 4/94: Speed Cushions
Traffic Advisory Leaflet 7/94: "Thumps": Thermoplastic Road Humps
Traffic Advisory Leaflet 9/94: Horizontal Deflections
Traffic Advisory Leaflet 7/95: Traffic Islands for Speed Control
Traffic Advisory Leaflet 10/96: Traffic Calming Bibliography

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The Department for Transport sponsors a wide range of research into traffic management issues. The results published in TALs are applicable to England, Wales and Scotland. Attention is drawn to variations in statutory provisions or administrative practices between the countries.

Within England, enquiries should be made to: Traffic Management Division, Department for Transport, 2/07 Great Minster House, 76 Marsham Street, London, SW1P 4DR. Telephone 020 7944 2478. E-mail: tal@dft.gsi.gov.uk