

# 05

## Traffic Management

### General Principles

Traffic calming measures should be fitted sensitively into the street scene as though they were part of the original design of the area. Local highway and planning authorities are encouraged to integrate their activities to minimise the impact of traffic management on the historic environment.



01 | A simple roundabout, uncluttered with superfluous signs or railings

Some traffic management designs can be difficult to integrate into an older streetscape and there can be no standard solution. Each feature or device should relate in its design and materials to the overall townscape to ensure that traffic calming reinforces rather than diminishes local character. Traffic calming measures using a combination of traditional materials and devices may help to secure the right balance. Further guidance is set out in Traffic Advisory Leaflet 1/96: Traffic Management in Historic Areas.

It is essential to consider the extent to which different kinds of traffic calming measures require signs. They should be kept to the absolute minimum in size and number to ensure safety and comply with legal requirements.

Schemes should not be designed solely by highway engineers without obtaining specialist design advice, as standard solutions will rarely be appropriate. Full consultation and co-operation between highways and urban design and landscape design staff within local authorities is essential.

In conservation areas, particular care needs to be exercised. Local authorities have a duty to ensure that new development preserves or enhances the character or appearance of the area and that should include highway works and traffic calming measures. Major schemes in conservation areas should always be referred to English Heritage for advice and guidance.

Significant interventions in the horizontal and vertical alignment of the highway may not always be necessary. Simpler approaches, such as alternating kerbside parking, may reduce vehicle speed.

Well-designed gateways, or the use of traditional materials such as granite setts, may be more costly as an initial outlay, but should be seen as a sound investment in the long-term future of the area. Where resources are limited, it is better to do less to a higher standard over a longer period of time than to compromise on quality.

The manner in which a road is treated at an entrance to a traffic calmed area should enhance the locality as well as effectively manage traffic.

Footway extensions and gateways should be designed in a form that would have been adopted had they been part of the original road design. These additional features should be designed to relate to the original geometry of the road and the architecture of the buildings.

Places for cycles and pedestrians to pass easily and safely are important. They should be integrated into the total design. For example a smooth surface for cyclists can be made by the subtle adjustment of a perimeter drainage channel.

Bollards should only be used if they are essential. They should be designed to be compatible with the style and materials of the surrounding area, and should be individually positioned to fulfil a precise task.

Full consultation with all user groups will ensure that a scheme meets all the desired functional and visual aspirations.

# Traffic management

Current best practice seeks to reduce the speed of traffic, allowing the removal of unnecessary road markings and the reduction of the size of traffic signs.

Traffic management measures must be considered in conjunction with the overall design of the street. All layouts must comply current traffic regulations. Use guidance to steer traffic projects, without stifling innovative design solutions.

Details are important. Pedestrian crossings should be designed to reinforce pedestrian priority and be visible to drivers without the need for added signs. Junctions should be determined by the surrounding built form instead of road markings. Controlled sight lines and reduced road widths may also contribute to speed reduction.

Car parking is a dominant feature that detracts from the visual coherence of the public realm. Authorities are encouraged to adopt comprehensive initiatives, such as the Historic Core Zones project and integrated transport strategies.

These strategies encourage alternative modes of transport by reducing through traffic, and restricting cars from central areas, implementing pedestrian-oriented schemes, and providing more comprehensive networks.



01 Pavement extensions can improve sight lines and pedestrians' safety.  
Lewes

**02** The grassed area beneath the trees has been extended to form a narrow, tight radius but highly visible junction with a plateaued carriageway



**03** Care must be taken not to confuse both pedestrians and motorists with too many surface changes. Horsham



**04** This pavement extension constrains traffic and provides space for spillout of audiences from the Guildhall. It also protects the balcony from vehicle damage. Guildford

## General Principles

A traffic management strategy should be part of a wider townscape management plan. It should be based on a careful urban design analysis of the character of the area.

Consider establishing 20mph zones create a safer environment for all.

Adopt a minimalist approach. Physical measures should involve minimal visual interference with the established street scene. Keep signs and other street furniture to a minimum.

Where practicable, all new devices should reinforce or enhance local character using traditional features or elements already found in the area.

Only use traditional materials in the highway, for example asphalt and granite setts. Colour contrasting surfaces and materials are usually unnecessary and undesirable and should only be used when they assist visually impaired people. Road marking should be confined solely to those necessary for highway safety.

Adopt devices which are easily integrated into the existing townscape. These include:

- stone setted surfaces, which may help reduce traffic speeds, and are traditional elements in many streets.
- rumble strips of stone setts laid slightly above the level of the existing carriageway at entry points or other locations
- entry treatments which reinforce the character of existing gateways into an area using traditional designs based on local materials and planting

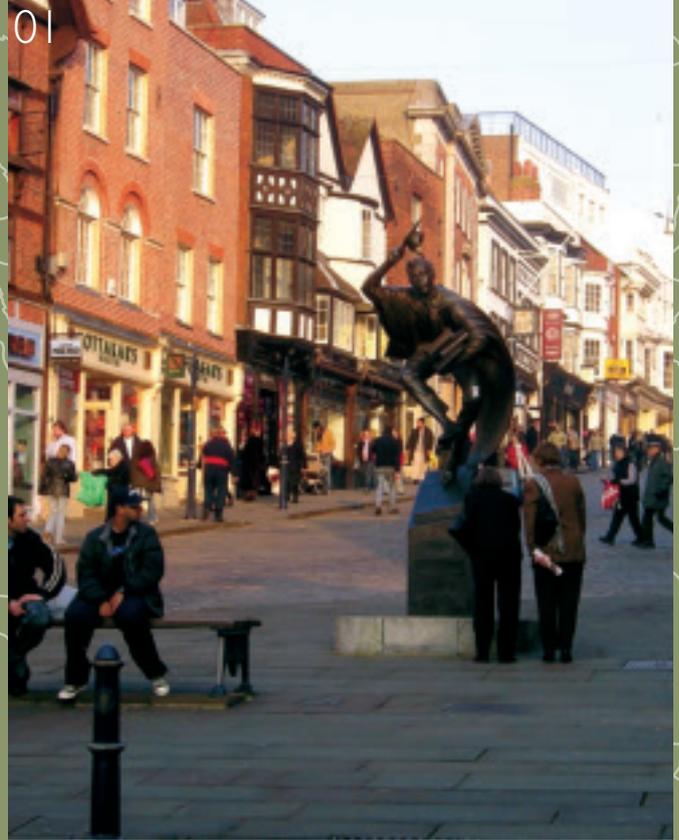
Detailed designs, construction methods, materials and workmanship should be of the highest standards.

# 06

## Environmental Improvements

### General Principles

Environmental improvements should enhance the qualities that make a place special and enjoyable to its users. Even small improvements can reinforce local distinctiveness and encourage greater public use.



01 | A statue complemented by simple paving creates a pleasant area for sitting and shopping

Where there is insufficient funding available to implement a scheme to the requisite standard, it is better to do less, in phases, and to a higher standard, as a long term investment in the future of an area, rather than to compromise on overall quality. Short-term solutions using cheap materials usually fail and detract from local distinctiveness. Projects should not be embarked upon unless adequate revenue provision has been made for their subsequent management and maintenance.

Pedestrianisation schemes require particular sensitivity. The key to success is to maintain rather than eradicate common features of the street. Kerb lines should always be retained to maintain the visual continuity of the street and to eliminate the need for bollards. Wall to wall surfaces should be avoided, with a clear definition maintained between the footway and the carriageway to provide a plinth for the adjacent buildings. The proportions of the footway to carriageway must be maintained.

Elaborate patterned or artificial coloured paving materials are seldom successful. Apart from the problems of maintenance and construction, the valuable function of a footway as a neutral and unifying element can be lost.

## General Principles

Pedestrianisation schemes require particular sensitivity

Kerb lines should always be retained to maintain the visual continuity of the street and to eliminate the need for bollards

Wall to wall surfaces should be avoided in historic areas, with a clear definition maintained between the footway and the carriageway to provide a plinth for the adjacent buildings

Attempts to introduce patterned or artificial coloured paving materials are seldom successful and can be difficult to maintain

Consult access groups and disability organisations

# Street traders

Activities define places as much as buildings; markets and shops are at the heart of many historic areas.

Outdoor cafes and street traders can add spontaneity and animation to the street scene. Street markets offer some of the regions most delightful and exciting experiences, but it is worth trying to avoid undue clutter, especially out of hours.

Street cafés can add colour and vitality to the townscape. Tables, chairs and umbrellas on the highway require the consent of the local authority and there should be times when they are cleared away so that the quality of the street itself can be appreciated.

Amendments to the Street Trading Licence laws would enable local authorities to insist on higher design standards.

## General Principles

Kiosks for the sale of such things as newspapers, fruit and vegetables add to the liveliness of streets

Encourage quality designs for kiosks, canopies and street furniture



01 Pavement cafés help bring streets alive. Winchester

02 Streets are for people. Exploit street spaces or squares for markets and events which create a focus for public life

# Public art



01 Public art is not necessarily contemporary art. Horsham

02 This dramatic landmark water sculpture in Horsham is a popular gathering spot

03 Beacon of Hope, Bournemouth



04 Subtle contemporary art can create new monumental focus in the most sensitive of historic sites. 'Moving in Light – Luminous Motion' Cathedral Close, Winchester

05 Sculptural notice board sponsored by *West Sussex County Times*. Tactile paving can be used to warn of a hazard. Carfax, Horsham

Public art can enhance our experience and understanding of a city, town, village or space. It should be used to enhance, orientation and identity, reinforcing a sense of place.

Public art covers a wide range of work both permanent and temporary. Permanent pieces include freestanding sculptures, monuments and street furniture. Temporary elements extend to murals, signage and performance events. All have the potential to increase the vibrancy of a space and provide visual interest.

The earliest forms of public art were probably preaching crosses, but from the 17th century patronage of the arts became more common. The 19th century witnessed a large increase in public art as statues and monuments were erected to celebrate local personalities and events. More recently fine new sculpture has been installed with innovative new designs.

Authorities should adopt a public art strategy. This will enable guiding principles relating to size, content, appropriateness to context, siting and maintenance costs of potential work to be clearly specified.

## General Principles

Promote temporary public art in order to maintain evolving visual stimulation

When commissioning public art, always consider:

- a clear brief
- scale
- durability
- lighting
- visibility from all sides
- landscape context

# Street trees and planting

Tree planting and landscape features should be used to enhance the space between buildings, reinforcing an area's character and appeal.

Throughout the South East, types of landscaped areas range from urban planting and green spaces, to smaller scale town or village greens.

Close co-operation between arboriculturalists, highway engineers, landscape architects and urban designers is vital to preserve and enhance the range and quality of street trees.

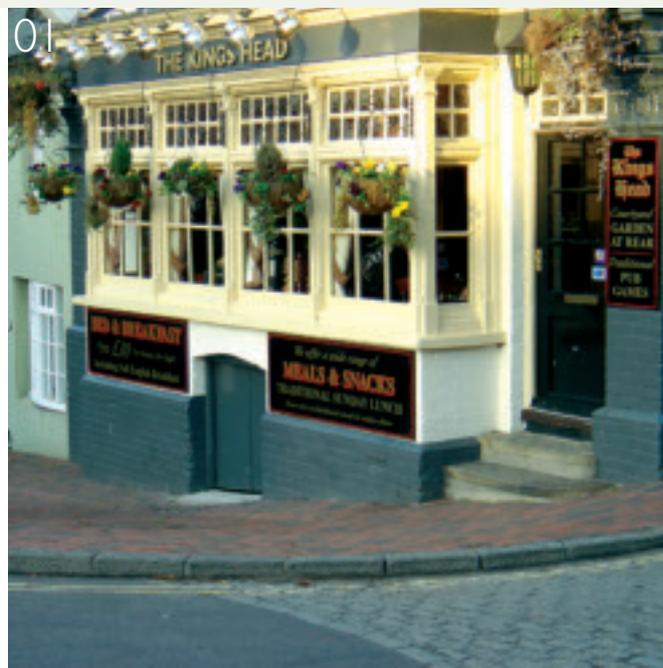
Avenues, boulevards, town squares and formal spaces, and informal rural locations all demand the application of different planting principles to be adopted.

Trees and planting should reflect the history, architecture and tradition of places. Small pockets of poor quality planting can undermine the quality of the streetscape.

Street trees and planting are not appropriate in every instance. Many fine urban streets and spaces can be enhanced by pruning or the removal of inappropriate or excessive planting. Trees and planting should always form part of the overall urban context, and not be added or preserved without question. Care must also be taken to maintain sight lines and the visibility of traffic signals.

Detailing of paving and protection of tree roots should allow for the continued expansion and settlement of ground levels around trees and careful routing and protection of services is essential to avoid damage and interruption. Water sources should also be protected. British Standard 5837 (1991) provides essential guidance.

Insurance companies frequently blame trees for subsidence (especially after dry summers). Pressure to remove or replace trees for insurance purposes should be countered.



01 Hanging baskets add colour and a sense that a place is cared for

02 Tree planting should be appropriate to the period and scale of its setting. Here, an avenue of mature trees creates a sense of calm in the centre of town. Causeway, Horsham



## General Principles

Select and locate trees in relation to the overall townscape with specialist advice

Avoid damage to fragile root structures

Use planting only where it makes positive contribution to the townscape

Avoid creating litter traps or maintenance liabilities, or hazards for visibility impaired people and wheelchair users.



03 A single specimen can enliven a quiet corner

# Lighting of buildings

Lighting is an integral part of streetscapes and should be considered in conjunction with all other streetscape elements. It can give a city, town, and village or space another dimension, enhancing visual stimulation, orientation and legibility.

Carefully designed lighting is an integral, not an additional, ingredient to creating successful spaces and streets for all. The lighting of buildings, trees and places animates the stage for the activities and exchanges of successful towns and cities.

With well-designed, co-ordinated lighting towns and cities can become pleasant places to enjoy by night as well as day. Street crime can be reduced and industry and commerce benefit through increased prosperity.

Local authorities should prepare outdoor lighting strategies for key buildings and areas to ensure that schemes are co-ordinated properly. An integrated plan can help to reduce ambient light levels, whilst possible energy savings can reduce the emission of greenhouse gases and light pollution. Care should always be given to energy efficiency, and the reduction of glare and light pollution.

The appropriate balance between lighting levels and the quality of the night sky is one that is best resolved through consensus amongst local communities. Well-directed, low-level lighting can be an important contribution towards such a balance.

Well-designed and co-ordinated schemes can add momentum to urban regeneration, enhance personal safety and improve the presentation of the environment. The 24-hour economy and social change place greater emphasis on the quality of the nighttime environment.



01 Concealed floodlighting carefully integrated into natural paving

When executed with care and sensitivity, subtle external lighting can provide a whole new architectural dimension to a building's façade – painting with light. Distant views and monuments can be given greater emphasis. However when done poorly, it can be damaging by throwing the balance of a building or a view out of equilibrium.

Trees, public art and street furniture provide a range of opportunities for imaginative lighting, in addition to the illumination of buildings.

Care needs to be taken to conceal fittings and cables, and to ensure that fittings and light sources complement the urban composition during daylight. It is vital that lighting schemes be designed as an integral part of any development or street improvement, and not added on at the end of the process or at a later date.

02 Monuments can be emphasised through restrained lighting, war memorial, Tenterden



## General Principles

Select the target buildings in relation to the overall townscape

Consider the potential for trade-off between floodlighting and street lighting

Consider the daytime aesthetics of light fittings, controls and cabling

Minimise the work needed for connections so that there will be no scars when installations are removed

Maintaining and implementing a programme of enhancement  
Sustaining a long-term view – over thirty years  
Making best use of limited resources

# Wells, Somerset

Wells, one of England's smallest cities, has been the focus of a programme of coordinated street design and enhancement schemes since European Architectural Heritage Year in 1975. The long-term view has been sustained by Somerset County Council through consistent in-house action.

Enhancement schemes in Wells have combined urban design and conservation in a continuous process, carried out incrementally as opportunities and resources become available. Throughout, an overall vision was maintained so that individual schemes become components of a whole. The gradual process meant that lessons could be learnt from earlier projects. This set of projects in Wells reflects a commitment to quality in design and management in the long term.

## Achieving environmental improvements

Wells Market Place was used primarily as a car park and the Conduit Head, once a significant landmark, was eroded and attracting clutter. To improve the quality of these key public areas, it was proposed that traffic was removed and the area resurfaced. Following discussion with local traders, an element of parking was included. It is now generally accepted that the scheme has improved the setting of local shops and retail environment in the city centre. The success in reducing the impact of the car has led to demands that the Market Place is closed to traffic in the summer, for the annual fair and the weekly market.

The public support for the Market Place scheme helped to promote projects in Sadler Street and High Street, which were funded by the Department for Transport as a traffic calming project. A Steering Group included local businesses, councillors and the town centre manager. Cyclists, the access group and the local community were also consulted through exhibitions and a community planning event.

The local Pennant sandstone was unavailable, so York stone was used as flagstones, kerbs and large setts at crossovers. Kerbs are set low to the carriageway. The characteristic gullies along the edges of the carriageways, almost continuously running with water (from the Wells) have been realigned, not for the first time in the history of the City, along the new carriageway. The frames for the gratings which bridge the gullies in various places were formed locally in Glastonbury.

A highway engineer joined the Historic Environment Service and became closely involved with the design philosophy of the scheme. A protocol has been approved whereby any works within the highway in a conservation area are referred to the Historic Environment Service. The overall concept was to produce a restrained, uncluttered environment, with local features. The area is a 20mph zone. Footways have been widened and parking only permitted where indicated (by signs fixed to walls). Cars parked outside the indicated areas cause an obstruction, so the scheme becomes self policing. There are no double yellow lines and hardly any signs or other markings.

## Timeline of Wells enhancement schemes.

### 1975-84 VICARS CLOSE

Refurbishment of houses was complemented with work to repair the historic street surface of cobbles and setts.

### 1987-89 CATHEDRAL GREEN

The improvement of footpaths provided better accessibility and a paved area in front of the Cathedral.

**01+02** The improvement of the Market Place in the early 1990's has been part of a continuous programme of public realm improvements since the mid 1970's

**03** Water channels incorporated into pavement design

01



02



**1990 UNION STREET**

Introduction of a shared surface enhanced the link between the City's major car parks and the High Street.

**1992-93 MARKET PLACE**

A major scheme to resurface the Market Place, using traditional paving, provided an improved setting for fairs and markets. It also resulted in a significant reduction in car parking.

**1997 RELIEF ROAD**

This significantly reduced the volume of traffic through the City centre.

**2001 SADLER STREET**

As a result of the relief road works it became possible to widen the footways in Sadler Street and reduce the need for signs and parking.

**2002 HIGH STREET**

The High Street scheme continues from Sadler Street using the same materials. It links earlier schemes in Union Street and the Market Place.

03



04



05



**04+05** Simple, uncluttered design details, good craftsmanship and the use of a limited range of materials, are appropriate to the quality of buildings and streetscape of the town

**BROAD STREET**

The possible future treatment of Broad Street would complete the linear improvements. The project aims to enhance the "entrance to the city" by recreating a tree-lined avenue.

**Conclusion**

These projects have largely been undertaken by the Historic Environment Service of Somerset County Council, with most of the funding and implementation through the County Highways Department with whom a continuing and creative relationship has been forged. Few counties retain this level of direct design of conservation projects.

The success of this programme shows the value of long-term commitment. It is rarely easy to raise funds for capital programmes. However, an important factor in Wells' success has been to invest what was available in quality.

Promoting best practice through the publication of manuals  
 Co-ordinating corporate action  
 Achieving design-led results

# Tunbridge Wells, Kent

In Tunbridge Wells, urban design and conservation are seen as key elements in the creation and maintenance of the public realm. The Tunbridge Wells Streetscape Manual and its rural counterpart reflect a commitment to involving all those charged with designing and managing work in the public realm.

The Tunbridge Wells Streetscape Manual stemmed from a Town Centre Management project and has been in use since 1996. The project included a sign culling exercise, leading to a comprehensive signing strategy, and also resulted in fewer guard rails on pavement edges.

The manual has formed the basis for negotiations with all stakeholders in the public realm, including the highways authority who use it as a good practice guide. It has been used in proactive negotiations with utilities companies for routing cable laying and siting inspection boxes.

A working group was established in 2000, comprising the Planning Department, County Highways, Environmental Health, and Tourism and Leisure, to agree key principles and develop co-ordinated actions. Over a number of years a high level of co-operation has been established, delivering coherent projects within a formal design framework. These include the creation of a market and public activity space in front of the Town Hall, funded through the transportation strategy.

The manual covers both the wider context of urban design and the morphology of the townscape, and details such as the details of paving and street furniture. Much of this is specific to the town.

The Pantiles is an early Victorian neighbourhood adjacent to the central core. Its restoration illustrates the manual in action. The authority prioritised the conservation of the existing brick pavements. The distinctive ragstone 'spall' chippings were supplemented with material from a new quarry. The manual emphasises the distinctiveness of each neighbourhood, keeping the design approach simple and restrained.

A rural counterpart was developed in 2003. Similarly, it establishes the character of the rural public realm and develops an approach which incorporates principles of sustainability, access for all users and safety. It highlights the need to respect soft, informal boundaries and edges to the carriageway. Road markings are discouraged as far as possible. The reduced engineering standards of rural roads are recognised and designers are directed to these for models.

## Conclusion

This example shows the value of clear written guidance, which is then used to produce tangible results of high quality. Streets for All aims to encourage all authorities to prepare local manuals so that best practice can become everyday practice.

Co-ordinating strategy  
Learning from a pilot project  
Tackling the skills deficit

# Devon County Council

Devon County Council has taken practical steps to identify shortcomings in the delivery of streetworks. It is now developing a comprehensive training programme to improve standards.

Following involvement in the Designing Streets for People report of 2002, the County Environment Directorate recognised the need for a Public Realm Strategy, which was published in 2003. Early on, the Strategy identified the need to improve design awareness, including political decision makers, designers and specifiers, contractors and maintenance personnel.

A working party of highway engineers, councillors, maintenance and conservation staff visited the Dartmoor market town of Moretonhampstead to identify problems and issues in the design of the town centre public realm. A schedule of improvements was drawn up and the maintenance contractor was instructed to undertake the works as an “as normal” specification contract. The process was monitored by taking before and after photographs.

The exercise highlighted problems in implementation, such as poor pointing quality in paving and insensitive location of signs in relation to buildings and street furniture. Significant limitations were also identified in specification writing and in the training of the personnel undertaking the works.

The working party, joined by the maintenance contractor, visited the eight local services offices throughout the county to publicise the issues and problems that were identified in the case study.



01 The importance of accurate specifications, choice of materials and quality of workmanship is emphasised in a session demonstrating traditional paving organised by the Faculty of the Built Environment of the University of the West of England, Bristol

The Environment Directorate is now building on the lessons learnt in the Moretonhampstead study, developing a training programme for all those involved in procuring quality for the public realm. The programme is in partnership with the Faculty of the Built Environment of the University of the West of England, Bristol, building on their Traditional Paving Research Project. The first stage has been a mapping exercise to identify the scope and content of a training programme.

## Conclusion

This case shows the added value possible when the separate disciplines of engineering, conservation and urban design are located in a common Directorate. The County Council has deliberately set itself a learning process that identifies shortcomings and is developing programmes to address them.

Applying management techniques to reduce traffic speed and volume  
 Relating lower speeds to reduced traffic sign requirements  
 Making use of local materials and skills

# Crossley Street, Halifax

A range of traffic management techniques were used to reduce the conflict of traffic speed and volume with significant pedestrian flows across the street. This gave the opportunity for innovation in traffic signs and surface detail.

Halifax was one of four historic towns participating in the Historic Core Zones Pilot Project promoted by the English Historic Towns Forum with support from the Department for Transport, English Heritage and the Civic Trust.

The key feature of the Halifax scheme was the division of the town centre into five zones with no access between them except for buses, taxis, delivery vehicles and cycles. This 'zone and loop' system has reduced traffic volume by 28%. The central Market Quarter is protected as a Pedestrian Zone during the day by rising bollards. People moving between the Pedestrian Zone and the carparks have to cross over Crossley Street and one of the aims of the Project was to minimise the potential for conflicts with vehicular traffic.

Local York stone was used to widen footways, and smooth sandstone setts provide crossing 'tables' level with the pavements. The resulting reduction in traffic speed has allowed the use of less obtrusive traffic signs mounted on tubular hoops just 1.1 metres high. The Department for Transport gave a special dispensation for the signs to be treated with a high reflectivity finish so that they do not have to carry their own external illumination.

Brass studs, manufactured locally, were used at crossing points instead of concrete tactile paving. Holes were drilled on site into the finished stone paving and the studs were bonded into the holes with resin.



**01** Crossley Street, Halifax, 1995. This scheme was one of the first to include metal stud tactile paving. The project included narrowed carriageways and raised crossings, resulting in greater safety and speed reductions of 8mph

**02+03** The non-illuminated low level traffic regulations signs pioneered at Halifax have not been repeated, but the simple, clutter free, concept has been used more recently, here at Kensington High Street, with recessed up-lighter external illumination

Although expensive, the studs avoid the need for special cutting and wastage associated with moulded slabs.

The scheme has reduced traffic flows by 28%, pedestrian activity has increased significantly and in a survey, 82% felt that the appearance of the street had been improved.

## Conclusion

This case has succeeded through multi-disciplinary co-operation. Reducing the speed of traffic meant that a reduced number of signs were needed, which in turn could be of a small size. The scheme shows how a town can be enriched by minimising sign numbers and taking advantage of quality materials.

Minimising traffic signs  
 Minimising road markings  
 Improving pedestrian accessibility

# Shrewsbury High Street

A series of twenty “courtesy crossings” along the High Street encourage drivers to give way to pedestrians. No formal crossings are used so the surfaces, road markings and street furniture associated with them are not needed.

Shrewsbury was one of four historic towns participating in the Historic Core Zone Pilot Project promoted by the English Historic Towns Forum with support from the Department for Transport, English Heritage and the Civic Trust. This experimental scheme was promoted by Shropshire County Council. Its purpose was to reduce street clutter in a historic town centre and improve the environment for pedestrians.

Shrewsbury High Street is used predominantly by buses during the day, though cars and service vehicles are not excluded. Physical alterations to the carriageway, rather than traffic regulation orders, have been used to reduce speed.

The carriageway was reduced to a minimum width of 3.5 metres and footways were widened accordingly. Clearly defined crossing places were constructed using smooth-faced York stone setts. The distinctive design and close spacing of the informal crossings (at an average of 30 metres) encourages drivers to maintain low speeds and give way to pedestrians. Speeds are seldom above 15 mph, giving ample time for eye contact between drivers and pedestrians.

The whole street is a restricted parking zone, so no yellow lines are necessary. Parking and loading bays are indicated by black basalt setts, a material found elsewhere in the town. The Department for Transport sanctioned a reduced size of loading restriction signs which are fixed to robust timber bollards at the edge of the pavement. The posts also help define the crossing



**01** A series of “courtesy crossings” at close intervals encourage low speeds. The crossings relate to pedestrian desire lines and to the precise architectural features of historic buildings along the street

**02** Delivery bays and bus stops are carefully designed in a limited range of materials and construction details. Traffic speeds were reduced by 7mph

points. As there are no controlled crossings, such as zebra or pelican crossings, there is no need for associated road markings or posts such as Belisha beacons or pedestrian and traffic signals.

The scheme has resulted in a 34% reduction in traffic volume, a 22% reduction in traffic speed and a high level of public approval.

## Conclusion

As an alternative to traffic regulation orders, physical methods can be effective in reducing the clutter of signs, lines and signals as well as promoting safety. However, care is needed to combine engineering and design solutions that relate to the precise conditions of the location.

Creating a high quality scheme by removing clutter  
 Reducing the length of guardrails  
 Using risk-assessment to aid design decisions

# Kensington High Street

High Street Kensington was comprehensively refurbished using high quality paving and street furniture. It was recognised that this quality should be supported by a reduction in clutter, particularly superfluous guardrails. An assessment process was devised to determine where guardrails could be removed or reduced in length.

Conventional wisdom on the effect of guard rails is being reconsidered. A parliamentary committee has questioned the need for the extent of guard rails, particularly those on pedestrian refuges that are likened to sheep pens.

At the intersection of Kensington Church Street and Kensington High Street, pedestrians formerly crossed the road using a three stage crossing. This required pedestrians to cross each lane and a left turn filter lane as a separate and distinct stage, each stage defined by guardrails and with its own press buttons and stop signal for pedestrians. There were four rows of guardrail in all.

This arrangement has been replaced with a single crossing over both lanes of the carriageway and the left turning traffic lane, with the stages no longer separated by refuges. More significantly, a risk assessment concluded that the guardrails could be removed on all but one side of the junction.

This required a safety audit and a design statement to justify the decisions that were taken. These were fully documented and approved by elected members of the Council. The scheme is constantly monitored with a view to erecting guard rails should the need arise.



**01** Until recently pedestrians had to cross the road in three stage and therefore wait, frustratingly, at three consecutive red lights

**02** The new signal arrangements allows the road to be crossed in one stage. All traffic signals, signs and guard rails have been reduced to what is considered to be a safe and lawful minimum. Disability groups were consulted during the redesign. The safety of this and other innovations in the street are being constantly monitored. After some two or three years the council has not found it necessary to change the scheme

Where the guard rails have been retained, it is because the risk of removal was considered to be too great. This is at a place in the road where there are no pedestrian refuges and traffic crosses from four directions

## Conclusion

The effect of high quality materials can be undermined by the clutter of street furniture, such as bollards and guardrails. However, their removal must be supported by sound decisions that have full regard for safety as well as engineering and design. Risk assessment is an important technique for reducing precautions to a necessary minimum.

At High Street Kensington, the redesigned junction has improved the streetscape and the setting of historic buildings. It has also added to the comfort of pedestrians crossing the road without compromising safety, which is continuously monitored.

Removing redundant traffic signs  
The Nottingham 'Clutterbuster' initiative

# City of Nottingham

Several local authorities now have comprehensive programmes for the systematic removal of redundant street furniture and clutter. A high profile programme is being undertaken at Nottingham.

Street clutter often accumulates because there is no single responsibility for the removal of redundant street furniture. Capital budgets exist to carry out new works, but maintenance budgets seldom extend beyond statutory requirements to allow for simple tidying up. Where authorities have embarked on such programmes they have been surprised at the amount of street furniture that has no current purpose.

All signs and equipment are originally erected for a specific purpose, but over time signs are duplicated, adjustments to traffic schemes make some unnecessary, and views on the need for some signs are also changing.

In addition, the legislation governing the need for signs may change. A notable recent change took away the need to provide the small yellow sign indicating no parking "at any time". The accompanying double yellow lines in the road are now deemed sufficient to enforce the restriction. At a stroke, thousands of these signs and their supporting posts can be removed from every town and village across the country.

Nottingham City Council's Clutterbuster seeks out and removes these signs and other redundant street furniture, such as small lengths of unnecessary guardrail.

The Clutterbuster with his van is active throughout the City and has removed over 2000 signs since 2003.



**01** The clutter buster programme has a high profile and is an innovation of which the City is justly proud

**02** Another post removed from the streets of Nottingham

**03** The amount of redundant signs and metal is staggering

*Photographer: Louise O'Gorman*

Clear guidance means he is confident in what has to be done, and he is provided with a schedule prepared in consultation with relevant departments of the Council. This is important because historic street furniture has often survived the test of time by default rather than by design. Now it needs to be identified and, where possible, kept in use.

## Conclusion

A clutter removal programme can have fast and dramatic effects, and it is readily appreciated by the general public. It is a simple way to enhance public spaces and it can be justified financially by the consequent reduction in maintenance costs.

Integrating highway engineering and urban design  
 Promoting corporate action  
 Discreet treatments for sensitive areas  
 Benefits of research into local solutions

# Suffolk County Council

A series of manuals giving guidance for highway works in sensitive areas has been published by the Suffolk Local Authorities. They are a product of a long standing collaboration between the County and seven district councils, and are one of a raft of procedures aimed to achieve more sensitive work on Suffolk's roads.

For the past fifteen years, officers of the transport and environment divisions of Suffolk County Council have been working with the conservation officers of the district councils to forge better interdisciplinary understanding and working practices.

This is in marked contrast with experience in many other counties where good conservation practice in respect of historic buildings can be undermined by inappropriate work in public spaces. Similarly some highway authorities see a failure of planning colleagues to understand basic engineering and safety requirements.

The procedures developed in Suffolk are not unique, but they do go further and are more structured than other counties. Since 1993, a Conservation Forum is held twice a year and is attended by the conservation officers of the County and district councils and representatives of each of the transport divisions at the County. Concerns are aired and good practice examples are presented, often with an accompanying site visit. The networking opportunities of Forum often resolve problems before they become an issue.

As a result of problems identified at Forum, conservation officers and engineers went on to write a series of good practice manuals to assist in the carrying out of work in a sensitive manner. These manuals are approved by Councillors as policy documents and include critical reviews of some of the work already carried out in the County.

When undertaking work, the engineer also refers to an electronic checking system EnCheck, to see if the scheme affects any sensitive areas. EnCheck will refer the designer to the relevant expert or external body for advice.

Wherever possible highway schemes are designed to be multifunctional: a well designed speed reduction scheme may also enhance a village conservation area and assist in attracting visitors to stop and contribute to the local economy – often thereby tapping into additional urban conservation, economic development and tourism funding.

The effect on the ground has been remarkable. Standard solutions are adapted to create schemes which respond to the special character of individual locations. Examples of such work in Suffolk include the planting of a hedge in an area of outstanding natural beauty as a speed reduction feature to visually narrow the width of the carriageway. In another place a need for a speed reminder feature was resolved by painting white an existing traditional railing around a culvert, thereby creating a visual narrowing.

Much of this work is small scale but the incremental effect of the continuous pressure to make roads safer, unless carefully thought out, can have a huge impact on the environment.

01 Features such as buff coloured surfacing, simple road markings and timber bollards are considered more appropriate to the Suffolk countryside



02+03 Build-outs using surface dressing and granite setts are simple, inexpensive and effective



04 The hedgerow on the right will, when matured, visually narrow the carriageway and is the first stage of a speed reduction scheme



05 This gateway reflects the character of a traditional toll gate which existed previously nearby



06 This light coloured surface at Kersey complements the rural local character

07 A timber footway neatly solves a local safety problem at Holbrook

## Conclusion

Suffolk does not profess to always do the right thing, but the close co-operation between conservation and design officers and the highway authority has led to significant improvements in the environmental and visual quality of highway works. In particular the unique quality of Suffolk is being protected from being overwhelmed by the excesses of standard highway solutions.

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# Principles of good practice

## Ground Surfaces:

- Relate ground surfaces to their surrounding streetscape context
- Avoid small paving modules laid in arbitrary colours and patterns
- When assessing costs, use sustainable accounting methods and consider life cycle costing
- Respect the subtle proportional relationship between the footways, buildings and carriageway
- Maintain and restore historic paving where it survives
- Respect local designs and details
- Retain or reinstate setted edges, cobbles and grass verges, taking into account the needs of all
- Avoid the unnecessary introduction of kerbs in rural areas
- Use road markings sparingly in sensitive areas, consistent with safety standards
- Consult local disability organisations on detailed designs and consider using access consultants

## Street Furniture:

- Identify and remove superfluous or redundant items
- Reduce new furniture to a minimum by good design
- Co-ordinate style, colour and siting of street furniture
- Compile an inventory of historic street furniture and make plans for their maintenance
- Consider recasting local designs, ensuring details are accurate and authentic
- Locate signs on buildings or at the back edge of pavements
- Avoid placing signs on new posts which add to clutter
- Avoid large backing panels and yellow backing boards
- Consider street lighting in conjunction with other light sources, shop windows and floodlit buildings
- Eliminate the need for bollards through higher quality kerb definition and good design
- Retain traditional telephone kiosks and post boxes

## Traffic Management:

- A traffic management strategy should be part of a wider townscape management plan. It should be based on a careful urban design analysis of the character of the area
- Adopt a minimalist approach. Physical measures should involve visual interference with the established street scene. Keep signs and other street furniture to a minimum
- Adopt devices which are easily integrated into the existing townscape. They include: Stone setted surfaces, which may help to reduce traffic speed, and are traditional elements in many streets; rumble strips of stone setts laid slightly above the level of the existing carriageway at entry points or other locations; entry treatments which reinforce the character of existing gateways into an area using traditional designs based on local materials and planting

## Environmental Improvements:

- Pedestrianisation schemes require particular sensitivity
- Wall-to-wall surfaces should be avoided in historic areas, with a clear definition maintained between the footway and the carriageway to provide a plinth for the adjacent buildings
- Promote public art in order to maintain evolving visual stimulation
- Select and locate trees in relation to the overall townscape with specialist advice
- Consider the potential for trade-off between floodlighting and streetlighting
- Consult local access groups or disability organisations

