

**Traffic Advisory Leaflet 10/97**  
**October 1997**



# Halifax Historic Core Zone

## ***Introduction***

The Historic Core Zones project is an initiative from the English Historic Towns Forum. It is investigating how effective traffic management schemes can be designed to suit areas with special historic character. The project is supported by the Department of the Environment, Transport and the Regions (DETR), English Heritage, the Department for Culture, Media and Sport, the Civic Trust and CSS (formerly County Surveyors' Society).

English Historic Towns Forum members were invited to submit applications for schemes to be taken forward as part of the project. From an initial 18 applications, schemes in Bury St Edmunds, Halifax, Lincoln and Shrewsbury were selected. The Driver Information and Traffic Management Division of DETR commissioned the Transport Research Laboratory (TRL) to monitor the schemes.

This leaflet reports on the scheme installed in Crossley Street in the centre of Halifax. It gives an overview of the scheme as a whole and details of its component elements. The leaflet is based on the results of the TRL research, which is described fully in TRL report 288. There are no standard solutions for historic areas, but local authorities might like to consider whether all or some of the elements of the Crossley Street scheme would be appropriate in their own areas.

## ***Scheme description***

Crossley Street is a one way street running from west to east, at the northern end of Halifax town centre. At the eastern exit from the street all vehicles except cycles are required to turn right. The street is fronted by many listed Victorian and Edwardian buildings including the Town Hall, and is in the heart of a conservation area. Prior to scheme installation the street carried about 5000 vehicles between 7am and 11pm on a weekday. The Crossley Street scheme is the first phase of wider works within the town centre, all of which are being designed in close collaboration with the Conservation Officer.

## ***Monitoring***

Activity in the street before and after the implementation of the scheme was recorded on video. This was supplemented with speed and flow data from automatic traffic counters. Vehicle flows and speeds, pedestrian activity and parking activity were evaluated from the information obtained. Interview surveys were carried out to gauge the reaction of the general public to the scheme. 200 people were interviewed.

## ***Traffic calming features***

Flat topped road humps and entry features were installed to slow traffic and aid pedestrian crossing movements, especially for disabled people. The humps are mostly 75mm high, with ramp gradients between 1:20 and

1:25. In the central section of the street one flat topped road hump extends between 2 side road junctions. The humps are generally constructed from sandstone and granite setts. The exception to this is the feature at the eastern exit of the street, where tarmac has been retained for the top of the road hump to allow give way markings to be painted. The footways have been built out to narrow the carriageway at each end of the street, from an average width of 12m to 8m at the western end, and 9m to 6m at the eastern end.

### ***Tactile paving***

Tactile surfaces at pedestrian crossing points were formed in two ways. At some points natural stone paving slabs were used, rather than concrete. At other points the tactile effect has been created by bonding brass studs directly into holes drilled into the slabs. Local authorities should satisfy themselves that such an approach does not constitute a slip hazard. The layout of tactile paving should comply with DETR guidance.

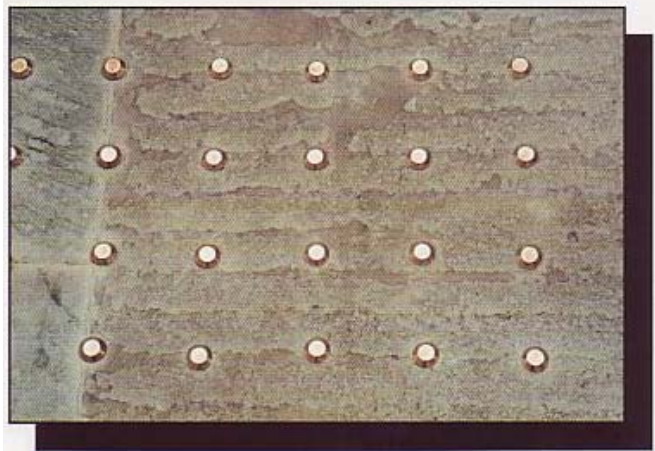
### ***On-street parking***

On-street parking arrangements were revised to tidy the layout of parking spaces in the street, and to provide 5 parking bays specifically for the use of disabled people.

To reduce the amount of street furniture needed, waiting restriction plates were affixed to buildings where possible.

A restricted zone was introduced. This designation is suitable for single streets or clearly defined small areas. It allows waiting and loading restrictions to be signed at the entrances to the zone, obviating the need for yellow lines within the zone. The restricted zone needed signs authorisation from DETR, which was given initially for an experimental period, on the assurance of police co-operation in enforcing the restrictions.

Only 10% of those interviewed had experience of parking in Crossley Street both before and after the implementation of the scheme. Most of these people found it at least as easy as before to identify where and when to park.





## Signing

Signs on Crossley Street were mounted at a height of 1m, within a tubular steel hoop topped frame. The Traffic Signs Regulations and General Directions 1994 (TSRGD) contain no specific requirements for the mounting height for most signs. However, care needs to be taken to ensure that low height signs remain visible to motorists. This was achieved in Crossley Street by mounting the signs in pairs on kerb build outs to create a gateway effect. There remains some risk that pedestrians passing in front of the signs may obscure them.

TSRGD requires many signs to be directly lit at night where they are sited in an area of street lighting. This is to ensure that they are sufficiently conspicuous, where signs are competing for attention against brightly lit shops or advertisements.

Special authorisation was given for signs in Crossley Street to be reflectorised with a special microprismatic sign face material. This can provide a reasonable level of sign brightness without needing luminaires. For it to be effective, drivers must be using headlamps; the signs must be presented reasonably squarely towards oncoming vehicles; and siting must ensure that light from headlamps falls directly on the sign. In Crossley Street the low mounting of the signs ensured they would be in the area of brightest illumination from headlamp beams.

Because of their practical limitations, the use of microprismatic materials as an alternative to direct lighting will only be appropriate in special circumstances.

## Other traffic management initiatives

The footway was repaved with local sandstone flags, flame textured to improve grip. To emphasise the banned left turn at the eastern end of the street, the layout of the road was reorganised to orientate vehicles for a right turn.





An audit of street furniture throughout the town centre was undertaken, with the intention of rationalising and reducing the number of traffic signs required. Other items of street furniture, such as litter bins, were carefully sited so as not to obstruct pedestrian movements. A parking voucher scheme was introduced across the whole of Halifax town centre at around the same time as the measures in Crossley Street were installed.

### ***Traffic flows and speeds***

After the introduction of the Historic Core Zone scheme, traffic flows in Crossley Street were recorded as falling by a third. It is likely that the reduction is a result of the combined effect of the Historic Core Zone scheme, the introduction of parking vouchers, an increased enforcement presence and the timing of the surveys.

Mean and 85th percentile speeds measured at 2 points within Crossley Street, both before and after scheme installation, were never more than 20mph. Speeds at the western end fell by approximately 8mph, attributable to the effect of the entry treatment in controlling speeds. Speeds further down Crossley Street rose by around 1mph. Speeds here were largely constrained by turning traffic and this increase may in part be due to the reduced vehicle flows recorded in the street.

A third of the regular visitors to Crossley Street interviewed felt that traffic speeds had fallen. A similar proportion felt that speeds had remained the same. The remainder were evenly split between feeling unable to judge, or feeling that speeds had increased.

### ***Parking activity***

The turnover of parked vehicles and the number of vehicles parked in the parking bays fell by about a third. This was in line with the reduction in the number of spaces available and the reduction in vehicle flows.

Occupancy in the limited waiting parking bays fell from 73% before scheme implementation to 51% afterwards. This decrease was most marked in the morning and afternoon peak periods. Illegal parking during the day fell. This can be attributed both to the increased enforcement presence in the Crossley Street



and to the reduction in the amount of kerbside space along which it would be possible to park illegally. Conversely, the level of illegal parking more than doubled during the evening.

### ***Illegal manoeuvres***

The total number of illegal turning movements recorded in Crossley Street was small, comprising 0.57% of all turning manoeuvres in the before scenario, and 0.32% after scheme implementation. This reduction was, however, statistically significant. It is likely to be attributable to the reorientation of the carriageway at the eastern end of Crossley Street to guard against the illegal left turn, and a simplified street scene.

### ***Pedestrian activity***

The proportion of pedestrians crossing along the length of Crossley Street, rather than at or near the terminal junctions, increased from 54% to 60%. Crossing movements were well distributed along the length of the street. The pattern of activity was not altered appreciably by the installation of the flat topped road hump in the centre of the scheme. Speeds were low in this street, and pedestrians clearly felt comfortable crossing the road at any point where it was convenient for them to do so.

51% of the regular visitors interviewed felt that the changes had made it easier and safer to cross the road, with a further 35% feeling that the changes had made no difference. 73% of regular visitors interviewed felt that the scheme had improved the ease of walking on the footway.

### ***Cyclists***

Very few cyclists were observed cycling along Crossley Street. 81% of the regular visitors interviewed felt unable to judge how the scheme would affect cyclists. Of the remainder, opinion was fairly evenly divided between an improvement, a deterioration and no change. Only two respondents had experience of cycling on Crossley Street since the scheme was introduced. Neither made any negative comments about the design of the scheme.

## ***General views from the public***

80% of those interviewed felt that the scheme had improved the appearance of Crossley Street. 46% said they would like to see similar alterations elsewhere, with a further 28% expressing no preference. Public transport users and people who had travelled on foot were more likely to be positive about the scheme.

58% of respondents did not or could not suggest any improvements to the scheme. The remainder had wide ranging ideas, most being suggested by only a few respondents each. The most common responses were for more pedestrian crossing points, and for an all-tarmac carriageway surface.

The responses given in the interviews by infrequent and first time visitors were broadly similar to those of the regular visitors.

## ***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 3434

Enquiries on details of the Crossley Street scheme should be directed to:

James Guthrie  
Technical Services Department  
Calderdale Metropolitan Borough Council  
Northgate House  
Northgate  
Halifax HX1 1UN  
Tel. 01422 392163

In Wales, comments on specific proposals may be sought from Cadw: Welsh Historic

Monuments, an executive agency of the Welsh Office. In Scotland, comments on proposals may be sought from Historic Scotland, an executive agency of the Scottish Office. These organisations carry out duties in respect of ancient monuments and buildings of historic interest in Wales and Scotland, on behalf of the Secretaries of State for Wales and for Scotland.

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

Traffic Management Division  
2/06 Great Minster House  
76 Marsham Street  
LONDON SW1P 4DR  
Tel. 020 79442974

Applications for 20 mph speed limits or signs authorisations should be addressed to the appropriate Government Office for each region.

## **References**

- TRL Report 288: Traffic Calming in Historic Core Zones - Crossley Street, Halifax
- Highways Act 1980
- Traffic Calming Act 1992
- Highways (Road Humps) Regulations 1996 (SI 1996/1483)

- Highways (Traffic Calming Regulations) 1993 (SI 1993/1849)
- Traffic Signs Regulations and General Directions 1994 (SI 1994/1519)
- Traffic Advisory Leaflet 1/93: Voucher Parking
- Traffic Advisory Leaflet 8/94: Traffic Signs, Signals and Road Markings Bibliography
- Traffic Advisory Leaflet 1/96: Traffic Management in Historic Areas
- Traffic Advisory Leaflet 9/96: Cycling Bibliography
- Traffic Advisory Leaflet 10/96: Traffic Calming Bibliography
- 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
- Civic Trust/ English Historic Towns Forum: Traffic in Townscape: Ideas from Europe - 1994

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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](mailto:tal@dft.gsi.gov.uk)