

Traffic Advisory Leaflet 13/99
December 1999



Historic Core Zone: Bury St Edmunds

Introduction

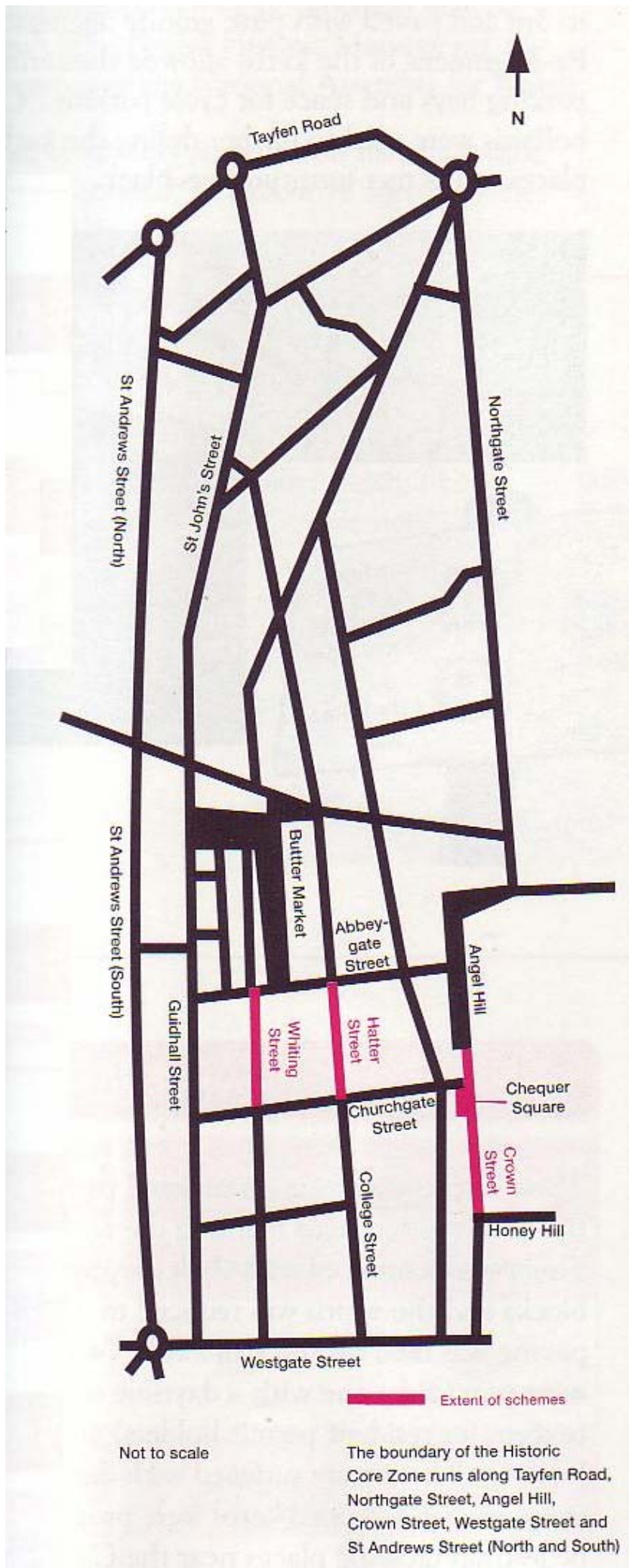
The Historic Core Zones project was an initiative from the English Historic Towns Forum. It investigated how traffic management schemes could be designed to suit areas with special historic character. The project was supported by the Department of the Environment, Transport and the Regions (DETR), English Heritage, the Department for Culture, Media and Sport, the Civic Trust and the CSS.

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 Charging and Local Transport Division of DETR commissioned the Transport Research Laboratory (TRL) to monitor the schemes.

This leaflet summarises the main results of the research at Bury St Edmunds, drawing from TRL Report 388. It reports on two schemes in the historic centre, one comprising Hatter Street and Whiting Street, the other Crown Street and Chequer Square.

Scheme description

Bury St Edmunds is a traditional historic market town. The centre still preserves its medieval grid pattern of mostly narrow streets and listed buildings. The Historic Core Zone lies within a larger conservation area and attracts many visitors. The zone was intended to address a number of problems including: pedestrian/vehicle conflict; through traffic; on-street parking; town centre servicing; excessive visual intrusion of traffic signs; vehicle speeds; and inadequate facilities for pedestrians and cyclists. It involved: defining a threshold at an entrance to the core zone; introducing a 20 mph zone with minimum traffic calming measures; rationalising road signs; HGV weight restrictions; more space for pedestrians. Prior to 1995, enhancement schemes for Abbeygate Street and St Johns Street had involved narrowing and paving the carriageways and widening the footways. This set the pattern for the schemes in Hatter Street and Whiting Street (installed in 1996) and Crown Street and Chequer Square (installed in 1997). The threshold gateway was erected at the southern end of Crown Street in 1999. The schemes were designed by St Edmundsbury Borough Council.



Hatter Street and Whiting Street

Signing was made less obtrusive and a restricted parking zone was introduced, replacing the yellow lines. Brown artificial stone block paving was used for the 2m wide parking bays. Grey granite setts were used for the loading bays, also 2m wide, contrasting with the grey artificial stone block pavings (in various sizes) used for the 3m wide carriageway surface. The parking/loading restriction signs, specially authorised by DETR, had x heights of 15mm. One way, Give way, and No entry signs were reduced to the minimum prescribed sizes. Footways were widened up to 3m and paved with pink granite aggregate slabs. Re-alignment of the kerbs allowed sheltering of the parking bays and space for cycle parking. Cast iron bollards were used to further define the kerb line in places. All street furniture was black.

Traffic Flows and Speeds

Overall weekday (24 hours) flows decreased by about 13% (from 634 vehicles to 513 vehicles on Hatter Street and from 1908 vehicles to 1693 vehicles on Whiting Street). Saturday flows increased by 6% on Whiting Street but fell by 35% on Hatter Street. Manual traffic flow counts indicated that the proportion of HGVs in the combined flow fell from 1.6% to 1.1%. The proportion of cyclists increased from 2.5% to 4.2%. As can be seen from Table 1, mean and 85th percentile speeds have been reduced by around 2 mph on both Hatter Street and Whiting Street.

Pedestrian Activity

The mean hourly flow across Hatter Street and Whiting Street was 369 (before) and 330 (after), an 11% decrease. The proportion of pedestrians crossing Hatter Street and Whiting Street rose from 21% to 22%.



Parking

Parking in the no waiting areas continued after scheme implementation. However, in both the before and after periods one-third of the arrivals stayed for less than three minutes, though 13% (before) and 11% (after) stayed for over 1 hour. In the permitted parking areas, limited to 1 hour, 21% parked for longer than this in the before period, reducing to 11% after scheme installation. Shorter duration parking increased, with 45% staying for less than 15 minutes.

Public Opinion Surveys

199 people were interviewed. Over half were female, and nearly one third were over 60.

Respondents had mixed overall feelings about the parking arrangements: nearly 40% were satisfied, but over a quarter were not. More than two-thirds found it more difficult to find a space and 20% said the signing was poor.

27 respondents had cycled along the streets at some time. There were mixed views on the effects of the scheme on cycling, with some saying the conditions had improved whilst others felt they had worsened. The commonest problem expressed was that the carriageways were too narrow for cycling when other traffic was near.

More than half of all regular and occasional visitors were satisfied with the scheme. Two-thirds of regular visitors thought the changes had benefited pedestrians. About half of regular visitors considered that the scheme had made no difference to the environmental impact of traffic e.g. noise and emissions. But 85% thought the two streets now looked better. About half perceived no change in volume and speed of traffic.



Crown Street and Chequer Square

These streets also form a restricted parking zone with the smaller-sized signs marking the restriction. Crown Street was resurfaced with dark grey artificial stone blocks and the width was reduced to 5.5m. Yorkstone paving was used for the footways. Two parking bays were provided - one with a daytime one-hour limit (except for resident permit holders) and one for loading. These were surfaced with dark red artificial stone blocks. Dropped kerbs were provided at pedestrian crossing places near the Cathedral and adjacent to Chequer Square. To provide tactile warning of the crossings, brass tactile studs were screwed into the paving. To indicate the entrance to the Core Zone, a specially commissioned gateway incorporating the restricted zone signs and the 20 mph speed limit applying to Crown Street was erected adjacent to St Marys Church. The number of parking places in Chequer Square was reduced from 23 to 20 (including 2 for people with disabilities). The maximum stay permitted was reduced to one hour (a survey had shown that over half the parking was under half an hour). The square was resurfaced with a fine gravel surface dressing to provide a warmer feeling to the area. Other enhancements were decorative street lighting, wrought iron railings and sign mountings, which were all specially commissioned.

Traffic Flows and Speeds

Automatic counts showed that traffic flows fell on weekdays by 16.4% (13,355 vehicles before, 11,167 vehicles after). The proportion of heavy vehicles (including buses) and cyclists on Crown Street fell from 1.3% to 0.8% and from 1% to 0.6%, respectively. As

shown in Table 1 only small changes were achieved in mean speed and 85th percentile speed.

Pedestrian Activity

Pedestrian flows were small, the mean hourly flow before being 87 and after 70.

Parking

The level of on-street parking was very low in both the before and after period. Where waiting was restricted there were 56 arrivals before and only 12 arrivals after scheme installation. The narrowed carriageway was undoubtedly the reason for the reduction in illegal parking.

Public Opinion Surveys

195 people were interviewed, with just over half being female. Comments on the effects of the scheme on cyclists were similar to the views expressed for Hatter Street and Whiting Street. Opinions expressed were that the carriageway in Crown Street was too narrow when other traffic was present, and gave a poor ride. Over a third of regular and occasional visitors were satisfied, but a quarter were dissatisfied. About half of regular visitors thought that the scheme had benefited pedestrians. Seventy percent of regular visitors thought the scheme looked attractive. Less than 30% perceived an improvement in the environmental impact of traffic. More than half did not perceive any decrease in the volume or speed of traffic.



Accidents

Insufficient time has passed since completion for meaningful analysis of any changes.

There were four slight injury accidents in Hatter Street and Whiting Street in the five year period before scheme installation, and two slight injury accidents in the 9 month period after installation.

In Crown Street there were four slight injury accidents in the five years before implementation and two accidents in the eight-month period after implementation.

Monitoring

This was carried out by means of before and after measurement of traffic flows and speeds, and video analysis (over a 16-hour period) of:

- vehicle composition and turning counts;
- pedestrian crossing movements;
- parking activity;
- sign compliance.

Advice

Advice on conservation aspects 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 can be obtained from:

English Heritage
23 Savile Row
LONDON W1X 1AB
Tel 0171 973 3434

In Wales, comments on specific proposals may be sought from Cadw: Welsh Historic Monuments, an executive agency of the National Assembly for Wales.

In Scotland, comments on proposals may be sought from Historic Scotland, an executive agency of the Scottish Executive.

These organisations carry out duties in respect of ancient monuments and buildings of historic interest in Wales and Scotland, on behalf of the National Assembly for Wales and the Scottish Ministers.

Applications for signs authorisations should be addressed to the appropriate Government Office for each region.

TABLE 1 OVERALL MEAN AND 85TH PERCENTILE SPEEDS (MPH)

STREET	MEAN SPEED MPH	MEAN SPEED MPH	MEAN SPEED MPH	85TH PERCENTILE SPEED	85TH PERCENTILE SPEED	85TH PERCENTILE SPEED
	BEFORE	AFTER	CHANGE	BEFORE	AFTER	CHANGE
Hatter Street	17.1	16.0	-1.1	22.3	20.2	-2.1
Whiting Street	14.3	12.4	-1.9	19.1	16.9	-2.2
Crown Street	23.1	21.3	-1.8	26.6	26.2	-0.4

Enquiries

Enquiries on the details of the Bury St Edmunds, scheme can be obtained from:

Ian Poole,
Planning and Information Manager
Department of Planning and Transportation
St Edmundsbury Borough Council
PO Box 122, Western Way
Bury St Edmunds
Suffolk IP33 3YS

Tel: 01284 757350

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

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

Tel: 0207 944 2974

References

TRL Report 288: Traffic Calming in Historic Core Zones - Crossley Street, Halifax

TRL Report 374: Traffic Calming in Historic Core Zones - High Street Route, Shrewsbury

TRL Report 388: Traffic Calming in Historic Core zones: Bury St Edmunds

Highways Act 1980 Traffic Signs Regulations and General Directions 1994 (SI 1994/1519)

Highways (Road Humps) Regulations 1999 (SI 1999/1025)

Highways (Traffic Calming) Regulations 1999 (SI 1999/1026)

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 10/97: Halifax Historic Core Zone

Traffic Advisory Leaflet 2/98: Lincoln Historic Core Zone, Newport Arch

Traffic Advisory Leaflet 8/98: The High Street Route, Shrewsbury

Traffic Advisory Leaflet 3/99: Cycling Bibliography

Traffic Advisory Leaflet 4/99: Traffic Calming Bibliography

Traffic Advisory Leaflet 9/99: 20 mph speed Limits and Zones

Civic Trust/ English Historic Towns Forum: Traffic Measures in Historic Towns - 1993

English Heritage: Street Improvements in Historic Areas - 1993

Planning Policy Guidance Note 15: Planning and the Historic Environment - 1994

English Historic Towns Forum: Traffic in Historic Town Centres -1994

Traffic in Townscape: Ideas from Europe (Civic Trust/ English Historic Towns Forum, 1994)

English Heritage: Conservation Area Practice - 1995

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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