

Traffic Advisory Leaflet 7/97
August 1997



Supply and demand for cycle parking



Introduction

The provision of good quality cycle parking is integral to the development of a cycle-friendly infrastructure.

This leaflet offers advice for practitioners to assist in the choice of suitable locations for on - street cycle parking. It is based on research carried out by the Transport Research Laboratory (TRL) for the Driver Information and Traffic Management Division of the Department of the Environment, Transport and the Regions. The results are described fully in TRL Report 276.

Method

Cyclists in Leicester, Nottingham and Southampton were interviewed about their cycle parking choices and their reasons for making these choices. This was supplemented with a beat survey of cycle parking activity in Southampton. All surveys covered a range of town centre land uses, including shopping areas, educational establishments, civic centres, a food superstore, a library, bus and rail stations, business and commercial premises.

Summary

Proximity to the destination is the major influence on cyclists' choice of parking location. This is regardless of journey purpose or parking duration, although the relative importance of proximity is greatest where cycles are parked for shorter periods. The attractiveness of cycle parking facilities also depends on factors including security, weather protection, ease of use and support for the cycle.

Stands placed in small clusters at frequent intervals will generally be of greater value than larger concentrations at fewer sites.

Sheffield stands were cyclists' preferred form of parking. Cyclists often made use of informal cycle parking opportunities, often in the absence of formal facilities and sometimes in preference to them.

Cycle parking stands should be located so that they do not obstruct pedestrian movement.

Duration of cycle parking

Figure 1 indicates how long cycles were observed to be parked from the Southampton video survey, and how this varied between locations. In addition the interview surveys

showed that almost half of those cycling for shopping or leisure parked for less than 30 minutes. An understanding of destinations and journey purposes in a locality will assist in determining the location for and type of cycle parking.

Distance parked from destination

Using detailed maps of each town centre the distance each cyclist parked from their main destination was measured.

Journey purpose Median distance (m)

Commuting	40
Business	50
Education	38
Shopping	125
Leisure	20

The shopping trips figure may be higher than would normally be expected, given that people on shopping trips tend to leave their cycles parked for shorter periods. The result can be explained by remembering that shoppers in town centres frequently have multiple destinations and therefore walk further from their bikes than people with a single destination.

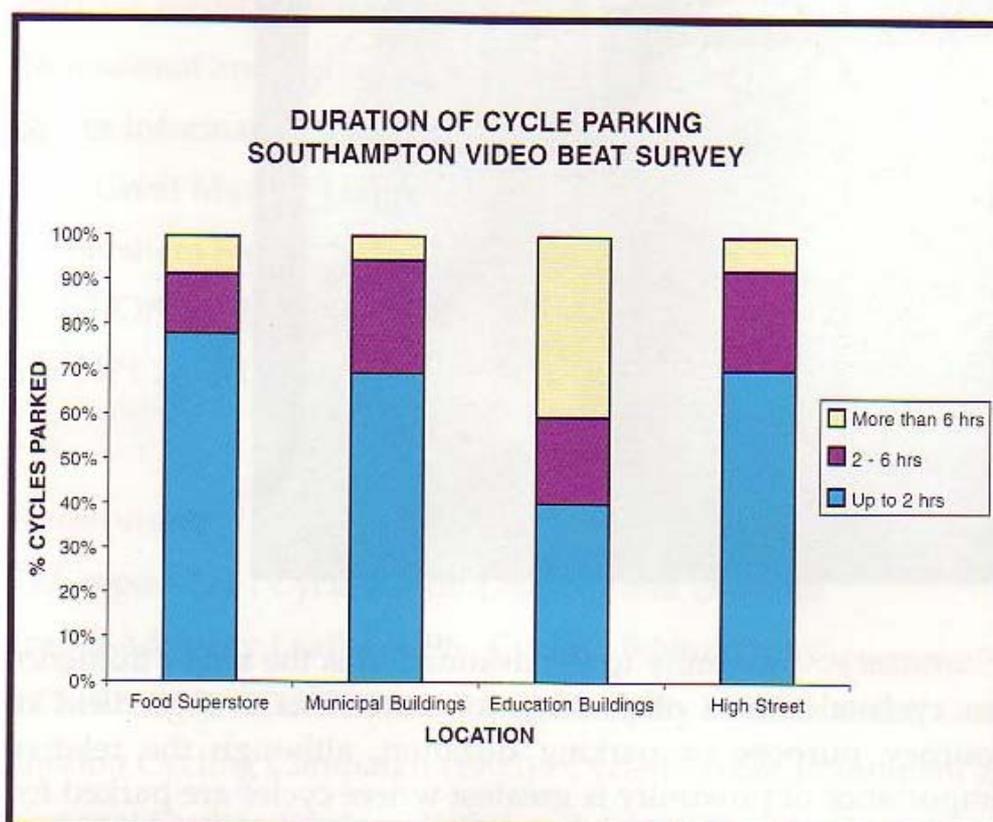


Figure 1

Approximately half of shoppers parking for less than 2 hours parked more than 100m from their destinations. This compares with 70% of shoppers parking for more than 2 hours. Such a distinction was not demonstrated for other trip purposes.

To a degree cyclists' preferences may be obscured in these results as the actual and preferred parking locations may not be the same. The behaviour of cyclists choosing to park informally (for instance, against railings or posts) may therefore give a clearer indication of preferences.

Of cyclists choosing to park informally, 75% parked within 50m of their destination and for less than 2 hours. This compares with 40% of cyclists leaving their bikes at cycle parking stands. This highlights the value of convenient parking locations for short stay trips.

The figures indicate that to be well used at a particular location, cycle parking needs to be located within 50m of the destination it is intended to serve. It further suggests that where there is a wide distribution of destinations across an area, such as in a retail and business core of a town centre, cycle parking stands will be of more value where they are distributed widely across the area, rather than concentrated at a few larger sites.

Reasons for choice of cycle parking location

Asked why they had chosen to park their cycles in a particular location, respondents gave the following answers (more than one answer was allowed):

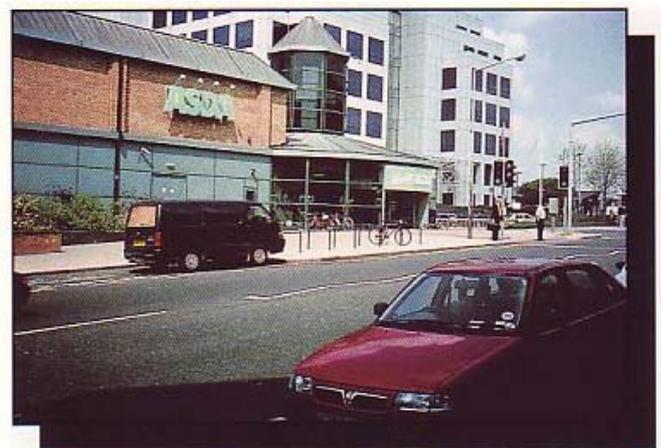
Close to destination	86%
Security	16%
Only place available	9%
Space is available	7%
Location is conspicuous/busy	6%

Given the high value attached to proximity to destination, stands which are not sited with this in mind are unlikely to be well used. If cycle parking stands are not available close to

their destination cyclists are more likely to park informally than seek out formal parking provision in a less convenient location.

Respondents were asked if they would be happy to leave their cycle parked for longer in their chosen location. 77% of people on commuting, business or education trips who were not prepared to leave their bikes for more than 2 hours, expressed concern about theft or vandalism. This compared with 52% of people on shopping, leisure or personal business trips. This indicates that although convenience is the dominant factor in choosing a parking location, security clearly has a significant role to play. It also shows that theft and vandalism are more prominent issues in cyclists' minds when they intend to park for longer periods. To promote security, stands can be sited in locations that are well lit, and are in clear view of passers-by or occupiers of nearby buildings.

Care needs to be taken to ensure that parked cycles do not obstruct pedestrian movements. This should be borne in mind in choosing the precise locations for parking stands.



Improvements to cycle parking

Cyclists were asked if they had any suggestions for improvements to cycle parking facilities. More than one answer was invited. Approximately a third of respondents offered no suggestions. A third suggested additional parking stands, a third asked for improved security and 7% suggested sheltered parking would be of value.

The greatest demand for additional parking was associated with retail development. Cyclists who were commuting, or who were on business or education trips were more likely to mention sheltered parking, indicating that this is of greater value to people leaving their cycles for longer periods of time.

Preferred types of cycle parking

Sheffield stands were clearly the most popular form of cycle parking stand. When presented with a choice of Sheffield stand, wheel rack or butterfly stand at a single location, greatest use was made of the Sheffield stands. There was no discernible variation in the results according to type of bicycle.

If cyclists perceive the cycle parking stands available at their destination to be of a poor quality they are likely to choose to secure their cycles informally - against railings or lampposts - at the same location.

Cycle lockers

Cycle lockers: Cycle lockers are suitable for medium and long term parking. They can offer a high level of security and can accommodate most types of cycle together with luggage and clothing. 70% of those interviewed said they would consider using a cycle locker, half of whom would be prepared to pay between 50 pence and £1. Inconvenience and cost were the reasons most commonly cited for not considering use of a locker. All the respondents making use of cycle lockers at the time of the interview felt that no further improvements could be made.

It should be remembered that the tendency for cyclists to rate convenience above security in their choice of parking location, will mean that cycle lockers, in common with other forms of cycle parking, will need to be located close to cyclists' destinations to be well used.

Identifying demand

A straightforward visual inspection is the simplest way of identifying locations where cycle parking is in demand, paying particular attention to informal parking. Origin and destination surveys for all road users can be used to target appropriate locations, and help determine potential demand. Consultation with local cycling organisations will also be valuable for identifying sites with latent demand.



Policy Context

The towns studied introduced cycle parking across their central areas as part of wider strategies to encourage increased cycle use. Provision for cycle parking is best made within this wider framework, as one component of a strategy to create a safe, convenient and attractive road environment for cycling. The National Cycling Strategy encourages all local authorities to develop such strategies, and to concert a programme of cycle parking provision at all major destinations.

Additional information to assist in the choice of type of parking equipment and its layout and installation, can be found in the documents marked * in the references.

Further Information

Walking and Cycling
Zone 3/27 Great Minster House
76 Marsham Street
London SW1P 4DR
Tel: 020 79442983

References

- TRL report 276 : Cycle Parking Supply and Demand
- Traffic Advisory Leaflet 9/96 : Cycling Bibliography
- IHT/BA/CTC/DOT (1996) : Cycle-Friendly Infrastructure: Guidelines for Planning and Design*
- London Cycling Campaign (1995) : Cycle Parking Equipment and Installation Standard*
- National Cycling Strategy (1996) and Appendices *

Traffic Advisory Leaflets (TAL) are available to download free of charge on the Department for Transport website www.dft.gov.uk

Sign up for a free e-mail alert to receive notification when a new TAL is published by sending an e-mail to tal@dft.gsi.gov.uk with the subject line "subscribe".

To obtain a printed copy of this and/or other TAL's, contact: DfT Publications, PO Box 236, Wetherby, West Yorkshire, LS23 7NB. Telephone 0870 122 6236. Fax 0870 122 6237. E-mail: dft@twoten.press.net

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