

Traffic Advisory Leaflet 3/96
April 1996



Bike and Ride

Introduction

This leaflet summarises research carried out on behalf of the Department of Transport (DOT), and offers technical advice based on it. The research was undertaken for the Driver Information and Traffic Management Division by the Transport Research Laboratory (TRL). It investigated the value of bike and ride schemes in encouraging combined cycle-public transport trips. The results of this research are described in TRL Project Report 189.

374 cyclists and 1287 motorists were interviewed at rail stations in Bedford, Cambridge, Guildford,

Milton Keynes and Woking, and at bus park and ride sites in Bristol, Oxford and York.

Summary

Bike and ride facilities can be valuable component in a strategy to create the conditions in which more people will choose to cycle, within an overall framework of ensuring a safe, attractive and convenient traffic environment for cycling. The research shows that to stimulate cycle-public transport trips the location needs to be considered in relation to the journey origin and final destination. At suitable sites the quality of cycle parking provision will be important. The journey purpose will also be an important factor.



Location of a site

Trips using the cycle-public transport combination are most likely to be encouraged by the provision of suitable cycle facilities where:

The public transport interchange is within convenient cycling distance of a traveller's trip origin.

The charts in Figure 1 show the proportions of cyclists and car occupants whose journey origins were within 3km and 5km of the park and ride site. Table 1 shows the median lengths of these journeys by mode.

The longer distances travelled by car drivers to reach the bus sites studied may explain why cycling was a less attractive option here than at the rail stations studied.

The public transport interchange intercepts a journey to work.

Table 2 indicates the differences in journey purposes for car occupants and cyclists arriving at the sites for the main journey purposes. It shows that cycling was a more attractive option for journeys to work than for shopping trips in the cases studied.

The length of the public transport section of the trip is likely to deter a traveller from cycling for the whole of their journey.

The median length of rail journey for those who had cycled to the rail station was 49km. The median length of bus journey for those who had cycled to the park and ride site was 3km. This difference may in part explain why more cyclists were observed at the rail stations than at the bus park and ride sites. Even so, 20% of cyclists interviewed at bus sites said they did not cycle for the full length of their journey because it was too far.

Facilities at and near a site

People will be encouraged to cycle to a suitable public transport interchange where:

Cycle parking facilities are secure and convenient.

Most cyclists parking at public transport interchanges will leave their cycles all day. More people may be willing to do this where they can be confident that their cycle will not be stolen, and will be protected from the weather.

70% of cyclists were satisfied with the standard of cycle parking provided at the sites. Where suggestions for improvement were made, these related to security, to shelter, and to the number of stands provided.

Facilities that were conspicuous were favoured by cyclists. Parking which is overlooked and well lit can offer improved security.

Concrete slots and butterfly stands were not favoured as attractive or secure parking facilities.

Cycle lockers are suitable for medium and long term parking. They offer a high level of security and can accommodate most types of cycle together with luggage and clothing without damage.

The journey from the trip origin to the rail station or park and ride site is safe and comfortable.

This can be achieved by introducing engineering measures to improve conditions for cyclists on the routes to the public transport interchange.

The Context for Cycle Provision

When cyclists at the bus park and ride sites were asked why they did not cycle for the whole of their journey, most gave reasons which related to poor cycling conditions along the route to their destinations, and poor provision for parking their cycles at the trip end.

Only 3.4% of the car occupants interviewed at the rail stations and 0.9% of the car occupants interviewed at the bus park and ride sites said they would cycle to the public transport interchange if their car were not available. Those car occupants who would not consider cycling gave a wide variety of reasons for their decision. Some of these related to the quality of facilities at the site, but most were concerned with the practicalities of cycling more generally and with a traffic environment in which cycling was perceived as an unattractive or unsafe option.

This points to the need to consider bike and ride within a wider framework of cycling provision. New guidelines published jointly by the Bicycle Association Cyclists Touring Club the Institution of Highways and Transportation and the Department of Transport, indicate how this can be achieved.

The package approach introduced by the Department of Transport for the funding of local transport infrastructure provides the opportunity for provision for cyclists to be made as part of an integrated traffic and transport strategy within Transport Policies and Programme submissions. Funding arrangements in Scotland and Wales, through local authority finance settlements, remain unchanged.

Cycle Carriage

In Guildford, 73% of cyclists arriving at the rail station took their cycles with them on the train. Many cyclists will wish to use their cycle at the other end of their journey, and facilities enabling them to transport their cycle on public transport will often be more attractive than parking facilities. The Cyclists' Public Affairs Group have produced a guidance note to help new rail operators assess the opportunities for improving facilities for the carriage of cycles on their trains, and for providing cycle parking facilities at their stations.

Cycle Challenge

Through the Cycle Challenge competition the DOT is investing nearly £2m in a variety of innovative projects intended to create the conditions in which more people will choose to cycle for local journeys. Of the 62 schemes being funded, 10 address issues associated with the integration of cycling and public transport.

Further Information

Walking and Cycling
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References

- TRL Project Report 189: Bike and Ride - Its Value and Potential
- Traffic Advisory Leaflet 9/95: Cycling Bibliography
- BA/CTC/IHT/DOT (1996): Cycle-Friendly Infrastructure - Guidelines for Planning and Design
- London Cycling Campaign (1995): Cycle Parking Equipment and Installation Standard
- Cyclists' Public Affairs Group: Bikes and Trains - Opportunities for the new Operators

FIGURE 1
CATCHMENT AREAS FOR RAIL AND BUS INTERCHANGES

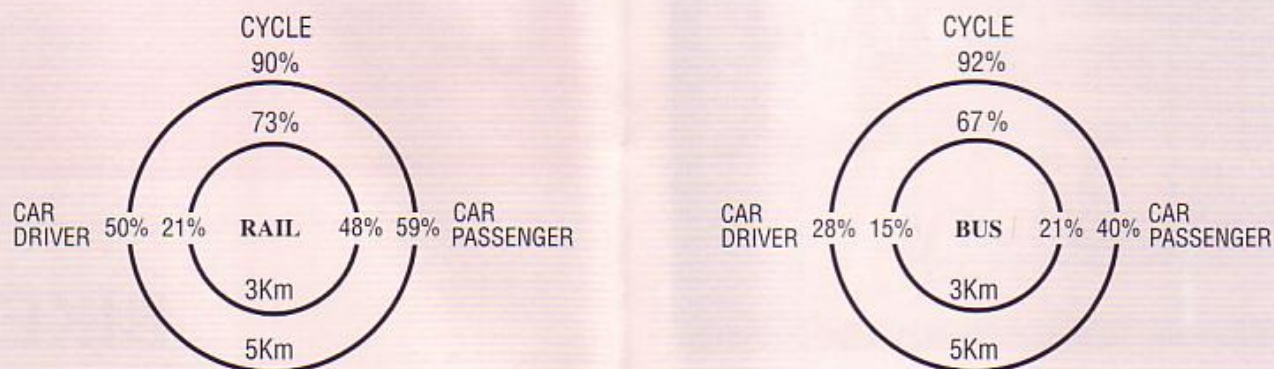


TABLE 1
MEDIAN DISTANCE (km) FROM TRIP ORIGIN TO PUBLIC TRANSPORT INTERCHANGE

	RAIL	BUS
CYCLE	2.2	1.8
CAR DRIVER	5.1	9.2
CAR PASSENGER	3.2	17.2

TABLE 2
MAIN JOURNEY PURPOSES BY MODE (%)

	CYCLE	RAIL CAR DRIVER	CAR PASSENGER	CYCLE	BUS CAR DRIVER	CAR PASSENGER
JOURNEY TO WORK	65.5	36.0	18.2	45.0	29.1	12.0
BUSINESS TRIP	4.3	28.0	25.6	0.0	7.1	1.0
SHOPPING TRIP	1.4	4.0	6.6	31.0	45.7	58.0
EDUCATION	11.9	5.0	10.7	7.0	2.5	4.0
OTHER	16.9	27.0	38.9	17.0	15.6	26.0

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