

Traffic Advisory Leaflet 5/99
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Bikerail - combined journeys by cycle and rail

Introduction

Bikerail is a composite journey involving use of a bicycle in conjunction with the railways. It incorporates a number of distinct activities as well as the facilities and services that enable bikerail journeys to take place comfortably and reliably.

Bikerail is a well-established option for commuting, residents, business and visitors in parts of the UK and much of Europe. It is relevant to authorities serving rural, urban and suburban communities.

Local authorities are well placed to identify how all modes of transport should be best influenced and developed in their areas. Planning, highway and traffic authorities are catalysts for investment and, as major employers, they have a pivotal role to play. This leaflet looks at how they might develop bikerail within Local Transport Plans. It draws on the lessons of the report 'Making the Connection: bikerail - a study of transport for the future' produced under the Government's cycle challenge scheme.

The benefits of bikerail

- highly relevant to everyone - 60% of the UK population live within a 15 minute cycle ride of a railway station;
- a cost effective way to extend the reach of the rail network;

- a safe way to travel with a bike over long distances, or overcome physical barriers and interruptions to non-motorised travel;
- easy to improve, seamless;
- a way of reducing car dependency

Scope for bikerail

A quantitative study of eleven train operating companies, drawing on demographic data from the 1991 census, covered the number of people between the age of 16 and 65 living within 5 kilometres from main railway stations. It showed:

- nearly all of Merseyside's work force live within an easy cycling distance of the railway
- over half a million people live within the 5km cycling catchment of Chiltern Railway's main commuter stations
- nearly two million have access to London through Great North Eastern Railway's intercity network
- over nine million people live outside London within the sample networks studied

Choice

The combination of bike and rail offers the customer a number of advantages. It is as flexible as the car for longer journeys and often quicker. It may also be cheaper and involve less effort. For every "kiss and ride" passenger who travels independently by bicycle instead, there are four fewer car trips, more time and greater choice for the "escort", and direct health benefits for the cyclist. Bikerail makes it possible to travel and circumvent congested areas. It does not rely on a local tradition of adult cycling.

The current market is diverse. Each local authority area has its own patterns of personal travel. Each train operator has a different passenger profile. Much existing provision has evolved in response to customer demands of motor traffic. Awareness, convenience, cost and reliability are the main determinants of rail use.

Presently bikerail is used by (car-owning) commuters, non-car owners and leisure cyclists. It is not restricted to regular cyclists or those who regard the bicycle as their main means of transport. For the majority, it is simply the best available option. For those with the least choice - those who don't drive - the flexibility of "turn up and go" services with the capacity to carry bicycles is particularly important.

Unsuitable rolling stock, low service frequency and frequent engineering works at week-ends have increased car use for leisure travel. A small number of cyclists with disabilities and young children do use the railways, although the opportunities for these groups are even more constrained than for the "independent" cyclist.

Journey quality

Passengers want and value a seamless service. What this means in practice depends upon the available alternatives, individual priorities, aspirations and willingness to plan ahead. Bikerail is most competitive when it is easy to cycle at each end of a quick rail service and simple to switch between cycling and rail. Generally this will mean availability of regular or high frequency rail services with walk-up provision for cycle carriage, linked to

safe and direct routes to stations. A good alternative for commuter services, which meets franchise commitments to peak hour passenger loading, is good quality, well sited cycle parking and hire facilities at stations at either end.

The quality of a bikerail journey is only as good as the weakest link. Any gap in provision - an overgrown path or a dangerous roundabout, a cold and hostile station platform, a complex and unreliable cycle carriage reservation system, irregular or low frequency rail services, limited provision for cycle carriage, lack of route signing to a connecting station, lengthy or stepped access to platforms, prohibitively high fares - will present a significant barrier to use.

Guidance is widely available on designing for access by bicycle including audit/review procedures, station and car park security, accessibility and cycle parking. More generally, substandard, badly located or poorly maintained bikerail facilities tend to exacerbate current trends. Before individual improvements begin to attract increased use, consumers need reassurance that they add up to a service that works; that concerns about safety, security, reliability and ease of use have been addressed, and that charges are reasonable and competitive. If improvements are based on an understanding of passenger needs and are designed to raise the status of bikerail, the potential take-up is large.

Demand

A number of factors will affect demand. These include:

- number of people living within cycling distance
- importance of local destinations for leisure, work or shopping
- conditions for cycle access to, and parking at stations
- frequency of rail services
- the security, signing and promotion of the station and attractions or destinations in its immediate vicinity
- public awareness through complete partnerships, and marketing
- availability and cost of car parking and other transport alternatives

Demand will be highest in areas where the advantages of bikerail are widely promoted and understood, and where stress-free cycle access combines seamlessly with fast, frequent rail services. Direct evidence such as the number of bicycles parked at a station is only an indication of demand under existing circumstances. It is not a measure of the likely take-up of improvements that increase choice and opportunity.

Whether demand is best met by provision for cycle carriage, parking, or hire will depend upon user needs, operational constraints and priorities. Is the aim to attract car owning season ticket holders, make provision better for residents who have little choice, or to reduce the car dependency of visitors?

The main factors to consider are:

- the environment in which the facility is to be placed
- the market to be established and developed
- operational and maintenance costs, and return on investment

The highest constant demand for station cycle parking will be at commuter stations in prosperous, congested areas where there is no provision for cycle carriage and car parking is expensive. Location of stations at both trip ends is the main determinant of use because it has a direct impact on security, passenger confidence, and public awareness. Lockers have been introduced at stations in Hampshire and a number of metropolitan areas outside London and are popular with mountain bike owners.

Cycle centres and guarded parks are a common feature at stations in Japan, Holland, Denmark and parts of Germany. They add value and produce a more sociable environment, opening up increased travel choice.

Whatever provision is made, it should not be seen as a once and for all exercise. It is advisable to plan for extra space for parking and for additional facilities which may be introduced as demand grows. Authorities should aim to monitor uptake and changes in conditions, and market improvements to rail

passengers and other groups - local cyclists, residents, visitors - as appropriate.

Rail commuters in the South East

Interviews with cycling rail commuters at London terminal and suburban stations in Surrey, Sussex and Buckinghamshire, and non-cycling commuters at Redhill, revealed a significant desire for bikerail among car owners. Few travelled distances to the station which they considered too far to cycle. 12% (at the start of the scheme) preferred to walk because they lived so close. Most of those who cycled used their car when they were not commuting and did not cycle at the weekends. Throughout the South East, rail passengers are subject to increasing car parking costs. At Woking, the main commuter station in Surrey, there is provision for cycle parking directly outside both station entrances. Steep increases in car parking charges resulted in a marked switch from car to bicycle. With improvements in bicycle access, parking and station security, 25% of rail commuters could be leaving their cars at home and using a bicycle to get to the station.

Reducing car dependence:

In developing what is for many people a new means of regular travel, the same levels of convenience need to be attained as in using a car. Using Geographic Information System modelling techniques, a quantitative comparison of accessibility by bikerail and other travel options is available to evaluate the impact of different investment packages. A new station entrance, prioritised cycle parking space close to or on platforms, a cycle bridge or a route across station land, all create new journey opportunities, and can reduce car dependency and open up the rail network. Where the cost-effectiveness of bikerail improvements have been quantified and compared with park and ride and feeder bus services, bikerail has been shown to be markedly superior.

The net effect of bikerail interchange improvements combined with better rail

services, better conditions for cycling with improved cycle access and parking, and increased costs of motoring, will be to give people a wider choice.

As authorities gear up to the new transport and social agenda, audits of interchange facilities will become standard practice. Bikerail needs to be plugged into the review and management frameworks. If this is done at the outset it is likely to involve little additional cost. It may also result in increased efficiency, cost saving, and higher property values as redundant buildings and station car parks are redeployed for public transport interchange, and other less car-focused development.

Cycle parking facilities and local bus services can be developed on a small scale to supplement pedestrian access to residential neighbourhoods. Provision of this kind is also more compatible with maintaining environmental quality and natural habitats. Using Sheffield stands, eight bicycles may be parked in the space of one car. Any switch from car to bike will help to free-up car park spaces for motorists living in surrounding villages beyond an easy cycling distance. Where there is insufficient land for station car parks, and restrictions on commuter parking in residential streets nearby, cycle parking facilities could fill the gap. Before investing in new parkway stations, park and ride, and car park enlargements, authorities should consider whether there is scope to bring provision for bikerail up to a reasonable standard and whether that would be preferable.

Public Transport Information

Providing information about bikerail facilities is a relatively low-cost way to improve access to public transport. Cyclists are no different from other rail passengers. They want to be able to use the railway as part of a seamless travel network. Meeting their information needs is unlikely to impose additional operating costs or reduce operational freedom.

Cyclists need to know:

- how to get to and from the station and principal facilities or locations at either end

- how they are provided for when they can't take a bicycle on the train with them
- whether bicycle parking provision is secure and accessible at all times
- the availability of bicycle hire
- whether platforms are at street level, and whether there are passenger lifts or ramps for access

A growing number of local authorities have produced local cycling maps and leaflets of leisure rides. Some train operators give details of services with the capacity to carry bicycles. Some provide information on whether there are facilities for parking cycles at stations.

It is important to know whether there is at-grade, ramp or lift assisted platform access. However, there is considerable potential to extend the information flow in a variety of ways. Government expects local authorities to set out the extent to which arrangements in their area meet the needs of users of all transport modes, and what plans they have to plug gaps and bring forward improvements. Comprehensive bikerail information is one such gap. There is also scope for joint marketing, with train operating companies and others in the private sector, through Travelwise and other green transport initiatives.

Cross-sector working and partnerships

A planned pattern of joint working can often resolve practical difficulties and overcome institutional inertia. A growing number of bikerail improvements are being delivered through community rail partnerships and other local programmes within which economic development is decoupled from motor traffic growth. The Bikes on Trains project in East Anglia offers a model for success. It has developed into a continuing programme of bikerail, sustainable transport and community developments, extending well beyond the initial project and its partners

Key features are:

- a wide skills base
- clear and agreed objectives
- the ability to attract external resources

- support and participation of users and the wider community
- a high degree of individual support and commitment from senior management

Cycle Mark

The CycleMark award scheme is supported by Sustrans, the Cyclists' Public Affairs Group and the CTC. It aims to highlight the progress made by rail operators in integrating bicycle and rail travel on long distance, commuter and rural services. Improvements include increased capacity for cycle carriage and cycle parking, upgrading of facilities, passenger information and marketing initiatives. Now in its third year, CycleMark is being extended to local authorities to encourage more broad based and sustained improvements.

Funding

Millennium Grant is available through Sustrans for linking appropriate stations by good quality direct routes to the National Cycle Network. Route and interchange improvements have been secured through development control, and through Rural Development and European Union social funds. The Rail Passenger Partnership (a grant) is now available as well.

The way forward - a systematic approach

Growth depends upon innovation. The publication - "Providing for Cyclists - a Code of Practice" and the related Cycle Mark scheme provide a checklist for action. Where usage is low, or data limited, a first step might be to review the constraints, the existing level and quality of provision, and other relevant programmes. It may not be possible to identify exactly what contribution individual bikerail measures might make towards achieving policy objectives at this stage, but this may be an additional incentive to make improvements and review the results. Recent research on census data suggests that there is an undisclosed potential to convert many short

commuting trips into cycling and walking journeys. This could bring sustainable transport and environmental benefits.

There are good practical reasons for treating bikerail as a distinct transport option within a local transport plan, giving it a development strategy, targets and a project manager. This would make it easier to identify opportunities, mobilise resources and to draw together those who might benefit from, or contribute to, the success of individual measures. There is considerable scope to attract external funding, and some supporting data is already available. Authorities will need to determine for themselves how progress is monitored and managed: what data to collect and how it is used, how benefits and potential are assessed, what targets are adopted, how the community is involved and satisfaction or success achieved. It is worth considering bikerail among specific targets for commuting or leisure travel and within programmes for social and economic development.

Acknowledgement

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