

3. Active Transport: The Cycle / Public Transport Combination

3.1 Introduction

Cycling is the healthiest transport mode for journeys of about 1km to 15km. Below 1km, walking is an alternative. Above 15km, the cycle starts to be too slow. One of the difficulties faced by all those who try to get people out of their cars is that no other transport system is seen as having the same universal flexibility. Public transport may be good for some journeys at certain times of the day but it does not reliably take people where they want to go at the time they want to go. The combination of the cycle and the train is however a transport mode which is capable of matching the flexibility and speed of the private car.

There is one transport mode that has the potential to be as flexible and universal as the car and yet it has been neglected to the point of virtual disappearance – the train/cycle combination (or indeed cycle/bus, cycle/coach or cycle/tram combination). People cycle to a railhead, take a train to another railhead, and then cycle to their destination. They either take their cycle with them, or they keep another cycle at the other end for a regular journey, or they hire a cycle at the other end.

3.1.1 Options for cycle / public transport combinations

There are four types of public transport / cycle combination:

- carriage of ordinary bicycles,
- folding bikes
- parking plus bicycle hire, and
- parking plus additional bicycle.

All of these are useful. The major improvement most higher-cycling countries, such as the Netherlands and Japan, have made is in terms of parking (cheap, safe, secure, plentiful). Caltrain, in the USA, has focussed on increasing cycle carriage on trains, but this is a less common approach.

The advantage of folding bicycles is that a designated cycle carriage is not required, as they take up no more space than a medium size suitcase. Although not suitable for long-distance or hilly/difficult terrain cycling, they are perfect for cycling relatively modest distances to and from railway stations. They have the added advantage that instead of having to risk abandoning the bicycles somewhere outside, they can be brought into buildings where they can be kept more safely. However, they can be heavy and awkward to carry, particularly up and down stairs.

3.2.2 Rationale for cycle / public transport combinations

The opportunity to combine cycles with trains or other forms of public transport is very important for the following reasons:

(a) cycling to and from railway stations could contribute substantially to meeting daily exercise requirements for individuals and hence help meet public health objectives on exercise, obesity and heart disease. Calculations in the BMA publication "*Cycling and Health*" show how substantial such measures could be.¹ At the time of that publication it was possible to meet the entire Government target on heart disease prevention by shifting a proportion of car journeys under five miles from car to cycle or foot. This is not a peripheral issue – it is a way of saving lives in substantial numbers.

(b) over the last 20 to 30 years, the country has developed a spatial distribution of industry and economic activity which is much more distributed than in the past and therefore much less easy to serve with public transport. Until the public transport system starts to

address this problem it will be conceding a large proportion of journeys as not susceptible to modal shift. The average commute is about 9 miles which is just about cyclable but for this to be the average, many commutes must be more than this. Conceding them to the car will entrench the position of the private car as the main mode of transport and make it impossible to reduce congestion or traffic pollution. The combination of the cycle with the train offers as much flexibility as the car – and potentially more reliable journey times - and is the only mode of transport which exists now and is able to compete with the car across the whole spectrum of journeys.

3.2.3 Current status: Trains

A strategic commitment to the promotion of the combination of cycling and trains is lacking in many countries, including the UK where the railways' current approach to this issue sees cyclists as a minority group to be catered for in small numbers on off peak services, while the government has failed to require train franchises to support cycle train combinations.

So completely has this mode of transport been neglected in the UK that most train operators find it difficult to accommodate more than one or two cycles on the same train and many operators ban cycles from trains at the very times when most people want to travel. Many local light rail operators ban non-folding bicycles entirely, such as the Docklands Light Railway (DLR) in London.

The emphasis in the UK is still on accommodating a few cyclists rather than on promoting a major transport mode. In Holland and Germany, the matter has been approached more positively in terms of cycling to stations and a large proportion of passengers now cycle to the station. This still leaves the journey at the other end not catered for but this may not matter if people then use local public transport or walk to their destinations, or have another bike parked at the destination station if necessary. The Association of Train Operating Companies (ATOC) considers that this "two-bike market" is currently constrained by a lack of available cycle parking spaces.²

Cycle parking at stations is also under-provided. 70% of respondents to a London Assembly Transport Committee survey considered that cycle facilities at Tube stations are inadequate, and 62% considered cited National Rail stations as providing inadequate facilities.³

The experience of Cal Train in California has shown that a vigorous promotion of the rail/cycle combination is commercially and politically viable. Cal Train has generous cycle provision on its trains: at least one cycle van on every train, and two vans on the most popular commuter trains, with capacity for 80 cycles. Cal Train measures the success of its promotion not in terms of the percentage increase in cyclists carried but in terms of the percentage increase in total ridership attributable to cyclists. It has faced the embarrassment of success outstripping provision and it has introduced a scheme whereby it offers regular users incentives to buy a second bike and have one at each end of their journey instead of taking the cycle on the train.

3.2.4 Current status: Buses

Bicycles are accepted on some inter-city coaches with an under-floor hold, notably Oxford-London services. However National Express, the UK's main inter-city coach provider, do not permit non-folding bikes in the hold.⁴

Carriage of bicycles on local bus services is not widespread in the UK, although there are some examples: on the Pembrokeshire coast, a bike-carrying tourist bus service was provided with the specific aim of allowing car-free holidaying, and in Sheffield, rural minibuses have been fitted out to accept cycles onboard and carry approximately 30 bicycles per month.⁵ Bicycle carriage on local buses by means of a rack attached to the front of the

bus is common practice in some overseas locations, notably many U.S. and some Australian cities.

3.2 Promoting the train / cycle combination

In evidence to the Strategic Rail Authority in the UK in 2004, the Transport & Health Study Group advocated the following programme to be linked to an active promotion of the train/cycle combination:

3.2.1 Short term measures

- Adequate and secure cycle parking at all stations for the benefit of those whose journey requires a cycle only at the origin end.
- Arrangements similar to those operated by Cal Train whereby passengers whose regular journey requires a cycle at each end are provided with secure cycle parking at both their origin and destination if they buy two bikes.
- Introduce compulsory requirement for rail refranchising tenders to address rail-cycle combination as a mass transit mode
- The addition of a cycle van to all trains.
- The introduction of cycle hire at selected rail heads from which cycles could access various non-rail-served destinations. This will soon be implemented in London through the new cycle hire scheme to be introduced in summer 2010.

3.2.2 Further developments

Further developments are then feasible once the initial approach has shown the viability of the combined travel mode:

- The introduction of through ticketing for journeys in which the cycle could fill a missing link
- The introduction of cycle hire at selected missing links.
- Consideration of station re-openings where a station could serve as a cycle rail head, or where new journey opportunities could be created by a short cycle connection.

3.2.3 A Europe-wide approach

The European Committee of THSG in 2009 went further in evidence to the European Commission, calling for a Trans-European Train/Cycle Network:

1. A European cycle/train network would be created by ensuring that the whole of Europe was:
 - within reasonable cycling distance (perhaps 5km in urban areas, 10km in rural areas and 15km in remote areas)
 - over a safe cycle route
 - from a cycle-Metro station with cycle hire, cycle parking and cycle storage.
 - each such station being served by a cycle-carrying public transport system (typically a train but in rural areas it could be a cycle-carrying bus or a ferry);
 - operating frequently (typically with a scheduled service every 15 minutes in urban areas, every 30 minutes in rural areas or every hour in remote areas, but where this is not economically viable demand-responsive services could be provided);

- these local services feeding into the European network of interurban, interregional, intercity and international trains, all of which should have a cycle van attached for the conveyance of bicycles; and
 - with proper provisions for cyclists to change trains at major interchanges in significant numbers without obstructing classic passengers.
2. The trains which provide this network would in most cases also function as part of the classic network and would also serve stations which are designed to be accessed on foot over shorter distances. However, for the cycle/train mode to be promoted as a viable alternative to the car, the additional provision needed will be more than just a small modification of the rail network. It will need additional rail vehicles, additional facilities at stations, additional stations, and additional cycle links to stations. It will be in many senses a new network for a new mode.
 3. We have advocated cycle carriage as well as cycle hire and cycle parking. There are some who would argue that if cycle carriage is universal, it is less important to focus on cycle hire and cycle parking. However it is wasteful and environmentally costly to carry cycles which are only needed at one end of the journey. The experience of Cal Train in California is that cycle carriage becomes overwhelmed if not supported by cycle hire and cycle parking.
 4. There are those who would argue that if cycle hire and cycle parking are universal and if there are facilities to move bicycles which are being left for several days from the station at which they were deposited to some central store (perhaps, for cost and environmental reasons, timing this transfer to use a train that would otherwise be lightly loaded) cycle carriage is not needed. However we believe that if everybody who was going away for several days had to deposit a cycle at one end and hire one at the other it would overwhelm hire and storage facilities.

3.3 Conclusions

What had moved forward between these two proposals was a deeper understanding of the issues of cycle hire and cycle storage versus cycle carriage (as set out in points 3 and 4 above) and more confidence in advocating the cycle/train combination as a separate transport mode rather than simply debating how the railways should cater for cyclists.

One important point that we did not make in either of the documents, but which should be borne in mind, is the significance of cost. The costs of cycle carriage, cycle hire and cycle parking must reflect the need to make this option attractive. In September 2009, the DfT announced a programme of investment in cycle parking at stations, having noted that 50% of the population own a bike and 60% live within 15 minutes ride from a train station, but only 2% of train passengers travel to the station by bike. In contrast, cycling accounts for a third of all trips to and from the station in the Netherlands.⁶ The THSG welcome the DfT investment but note that more will be needed to achieve levels of cycling comparable to the Netherlands.

If the bicycle had never been invented, and it was invented tomorrow by a railway company as its answer to the car, there would not be a railway in the world that was not clamouring to have it.

3.4 References

¹ British Medical Association. *Cycling: Towards Health And Safety*. London: British Medical Association, 1992.

² ATOC, stakeholder meeting, transcript, p. 20 cited in London Assembly Transport Committee 'Stand and Deliver'

³ London Assembly Transport Committee. *Stand and Deliver: Cycle parking in London*. London: Greater London Authority, June 2009.

⁴ <http://help.nationalexpress.com/help/general/bicycle1> (accessed 13/01/09)

⁵ www.ctc.org.uk/DesktopDefault.aspx?TabID=4578 (accessed 13/01/09)

⁶ Department for Transport. *Rail passengers encouraged to get on their bike.*

<http://nds.coi.gov.uk/clientmicrosite/Content/Detail.aspx?ClientId=202&NewsAreaId=2&ReleaseID=407056&SubjectId=36>