

WILLIAMS REVIEW OF BRITAIN'S RAILWAYS Summary of response from Cycling UK

INTRODUCTION

About Cycling UK

Cycling UK was founded in 1878 and has 65,000 members. We represent the interests of current and would-be cyclists on public policy matters, seeking to 'normalise' cycling both for day-to-day transport and as a leisure activity, thereby maximising its health, economic, environmental, safety and quality of life benefits both for individuals and society. Hence, we seek to create the conditions where it becomes a safe, accessible, enjoyable and 'normal' activity for people of all ages and abilities. We were previously known as the Cyclists' Touring Club, or CTC, the national cycling charity.

The case for better integration of cycling and rail travel

The combination of cycling and rail travel can take several different forms. It can involve cycling to or from the station, parking one's pedal cycle at one or both ends of the journey. Or it can involve taking one's own pedal cycle on the train – this can either be a conventional bicycle or a folding bicycle, the latter being popular among cycle-rail commuters due to the difficulties and restrictions which, understandably, prevent cycles being carried on some peak hour services. Another possibility is using a hired pedal cycle at one end of the journey, potentially from a public hire-bike scheme (such as London's 'Santander Cycles' - commonly known as 'Boris Bikes').

Facilitating these various ways of combining cycling and rail can provide a range of benefits, for individual passengers, for rail operators and for society more generally.

- *For passengers*, the cycle-rail combination provides a healthy and convenient door-to-door journey option which does not depend on the use of a private car. This can be especially valuable for those who do not / cannot drive, including many people with disabilities who can nonetheless use pedal cycles as mobility aids. Even for those who can drive, choosing instead to cycle to the station provides health benefits, and usually saves both time and money. It avoids both car running costs and station car parking charges, as well as the delays involved in finding a parking space and, in stations with larger car parks, the time lost walking from one's parking place to the station itself. Finally, cycling can provide very substantial time-savings on many journeys, enabling passengers to make rapid cross-town interchanges and to complete their onward journeys (in cities, towns and rural areas alike) without the delays involved in making other public transport connections.
- *For public transport operators*, enabling passengers to cycle to the station increases the catchment area for rail services sixteen-fold, compared with the distances that can be walked in the same amount of time. This can make a crucial difference to the viability of rail services, particularly in rural areas. It can also reduce the need to provide car parking on high-value land near stations.
- *For society*, enabling more people to cycle reduces congestion, road danger, pollution, physical inactivity and greenhouse gas emissions. It can also strengthen local economies in rural areas by bringing in recreational cycle users, including families, touring cyclists and mountain-bikers. It can also substantially reduce crowding on connecting urban public transport networks. For instance, London's underground network suffers acute peak-hour overcrowding between the mainline stations, but this could be considerably worse if it wasn't for the large numbers of people who are now cycling instead. There is plenty of scope through for cycling to play a much greater role in reducing this overcrowding, e.g. through better integration of rail and hire-bike schemes.

The potential for cycle-rail

In the Netherlands, 42% of rail trips involve cycling at the 'home end' of the journey,¹ while 11% of rail trips are completed by bike at the non-home end.² By contrast, just 2.8% of rail trips in Britain in 2015 also involved cycling (48 million cycle-rail trips out of a total of 1.718 billion rail trips), though the number had increased by 40% compared with 2010 Investment in cycle parking at rail stations. The number of cycle spaces at rail stations has more than trebled over that period, to 77,000 spaces, while the number of rail journeys involving a cycle being parked at a station almost doubled (from around 16m to 28m). However, rail journeys involving cycles (including folding bikes) being carried on trains has also grown, from around 17m to around 20m.³

More promisingly, the Government's Cycling and Walking Investment Strategy (CWIS), published in 2017, set an aim to double the number of cycling 'stages' from 0.8bn in 2013 to 1.6bn in 2025, as part of a wider ambition "to make cycling and walking the natural choices for shorter journeys, or as part of a longer journey".⁴

Rail operators need both to support this ambition, and to be ready to accommodate it.

Given the inevitable limitations on the numbers of cycles that can be carried on an intensely-used and often-crowded rail network, the main measure to increase cycle use to and from stations is to provide high-quality cycle parking, along with more managed cycle storage and hire facilities at larger stations. Nonetheless, the ability to carry one's pedal cycle, particularly on off-peak trains, is important to some customers (particularly those engaging in recreational cycling). Making provision for cycle carriage can significantly help boost the economic viability of more likely-used train services that might otherwise be economically marginal.

What needs doing to maximise the benefits of cycle-rail integration

Action to maximise the above benefits can be considered under 8 broad headings:

1. Providing safe and convenient cycle access to, from within and through stations
2. Safe, secure, accessible and well-designed cycle parking at stations, together with hire and storage facilities at larger stations
3. Providing formal and informal cycle spaces on trains
4. Developing convenient ticketing and reservation systems
5. Information and publicity
6. Supporting large cycling events
7. Stakeholder engagement
8. Monitoring and review of what is working.

We consider each of these issues in the remaining sections of this document.

It is perhaps worth noting at the outset that most of the above issues can be addressed by national Government through the franchising process. Hence most of our recommendations involve specifying cycle-rail integration measures in future franchise agreements (n.b. the Welsh Government has been exemplary in this respect in requiring bidders for the new Transport for Wales franchise to specify their commitments to Active Travel).

¹ http://bitibi.eu/dox/D4_4_BiTiBi_Global_evaluation_report.pdf.

² <https://www.fietsberaad.nl/getmedia/1c52943f-8948-4539-8b0d-4fda6048b1a2/Tour-de-Force-Bicycle-Agenda-2017-2020.pdf.aspx>.

³ Unpublished reports to the Government's Cycle Rail Working Group (CRWG).

⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/603527/cycling-walking-investment-strategy.pdf

However, a few of our recommendations need to be addressed in other ways:

- Access to and from stations requires collaboration with local authorities.
- Addressing the problems of reservation systems, facilitating access to cycle hire facilities, integration with hire-bike schemes and local public transport services requires collaboration between operators to put nationwide inter-operable systems and standards in place.
- Network Rail needs to collaborate on providing cycle access, parking and storage at stations and land which it manages.
- There is a role for the Rail Safety and Standards Board (RSSB) in researching and monitoring what is (or is not) working and recommending improvements.

Cycling and inclusive mobility

Before considering the above 8 headings, we should draw attention to the synergies between the needs of passengers with pedal cycles and those of wheelchair users.

For one thing, enabling wheelchair users to travel independently requires the provision of step-free access. This obviously benefits cycle users too, but is particularly beneficial for those travelling with heavily loaded cycles (e.g. touring cyclists) and/or those who use cycles as mobility aids. A surprisingly large proportion of Cycling UK's members have difficulty walking but are able to cycle, benefiting from the fact that it is a non-load-bearing form of active travel. Some people with disabilities depend however on non-standard cycles, e.g. hand-cycles (for those without the use of their legs) or tandems (e.g. for blind cyclists). Where pedal cycles are adapted for the needs of a disabled person, the pedal cycle should in law be considered as a Type 1 invalid carriage and its use treated accordingly.

If lifts at stations are designed for the needs of mobility scooters, they can also accommodate all forms of non-standard cycle, as well as benefitting touring cyclists and others with heavily laden cycles. However cycle spaces on trains, and cycle parking at stations, rarely take account of the needs of those using non-standard cycles. It is ironic that cycle users often face restrictions on their use of spaces on trains because of the priority needs of disabled people, when many cycle users are themselves disabled and are themselves using cycles as mobility aids.

1. CYCLE ACCESS TO, FROM, WITHIN AND THROUGH STATIONS

Cycle access to and from stations

In England, the Department for Transport encourages (but does not require) local highway authorities to develop Local Cycling and Walking Infrastructure Plans (LCWIPs), while in Wales, the Active Travel (Wales) Act requires Welsh local authorities to draw up Integrated Network Maps (INMs). LCWIPs and INMs are in many respects similar: they involve developing local cycling and walking networks and prioritising schemes. The emphasis on network-planning is important: it seeks to overcome a long history of poor cycle planning in Britain, where schemes tended to be planned without considering how to join up the starting-points (or 'origins') and end-points ('destinations') of people's journeys.

Rail stations and other public transport interchanges are clearly important destinations and it is crucial that public transport operators liaise with local authorities to ensure that cycle access into and within the station boundary integrates with the local authorities' provision (or future plans) for safe, convenient and coherent local cycling networks. Hence they need to actively engage with the development of LCWIPs in England, with INMs in Wales, and with any other local cycle network planning processes in Scotland or in areas of England without formal LCWIPs.

Cycle access within and through stations

Our introductory remarks have already noted the synergies between providing passengers with cycles and wheelchair users. The opportunities to provide additional benefits for cycle users should be considered when station accessibility improvements are being planned.

Where step-free access cannot be achieved in the short-term, cycle accessibility can be improved by using wheeling ramps – i.e. grooved channels or slopping infills to the steps, which allow cycles to be wheeled up and down, rather than having to be carried. These should be designed to be compatible with needs of other users, especially those with a mobility impairment. The detail of their design is important: for instance, the wheeling ramp must be sufficiently far out from the handrail so that the latter does not obstruct the cyclist's handlebars, yet close enough so as not to obstruct passengers with impaired mobility from being able to use the handrail easily.

Carrying cycles (and indeed prams) up or down escalators is prohibited, yet this rule is widely flouted, and we are not aware of any negative consequences from this. Forcing cyclists and pram-users to use lifts unnecessarily would merely increase the time that others (including wheelchair users) need to wait before they can access a lift.

2. CYCLE PARKING, HIRE AND STORAGE FACILITIES

In any strategy to increase cycle-rail travel, the greatest potential for growth comes from increasing the provision of cycle parking, storage and hire facilities at stations. Cycle parking is a highly cost-effective solution for boosting cycle use, attracting new passengers to travel by train, and reducing car use for journeys to stations

The following subsections set out what needs doing to maximise this potential.

Meeting different user needs in different locations

Firstly, the quantity, type and location of cycle parking, hire and storage provision at stations needs to reflect the different needs of users at different types of station:

- *'Home end' stations* (e.g. suburban or commuter-belt stations in rural hinterlands, particularly those which are remote from the settlement(s) they serve. These mostly need 'informal' cycle parking for daytime use, but under CCTV surveillance (given that many people will be regular users, whose daily habits can be easily observed by would-be thieves).
- *'Work end' stations* (e.g. in city centres) and *'Mixed' stations* (e.g. Reading or Cambridge, where outbound-commuting roughly equals inbound commuting). Both these types should preferably have some form of managed secure storage (this is particularly beneficial for those who regularly leave their cycles overnight at the 'work end' station), as well as less formal 'casual' parking. Cycle hire facilities, or access to local public hire-bike schemes, are also valuable at these station types, both for the benefit of infrequent passengers and to reduce the need to leave bikes parked for occasional use.
- *Rural stations* with recreational cycling demand. These too can benefit from cycle hire facilities e.g. aimed more at families, or, in some locations, off-road riders and mountain bikers.

Cycle parking and storage

Providing cycle parking is a highly effective measure to boost both cycle use and rail travel. At larger stations it is possible to justify investment in more securely managed storage, giving passengers greater confidence to leave their cycles regularly, or for extended periods.

Cycle parking and storage facilities need to be:

- *Accessible* – e.g. they should not require cycles to be carried up or down flights of steps.
- *Easy to find* (with good signing) and *conveniently located*. At larger stations with multiple entrances, some informal parking should be provided near each entrance, so that cycles can be parked before entering the station. However in the case of more formal managed facilities (which usually need to be at a single location), these should be as close as possible to the ticket office or gate-line, i.e. they should be convenient whatever direction a passenger enters or leaves the station from. At 'home end' stations, it is preferable to locate parking and storage facilities to suit passengers' 'morning' travel patterns, (e.g. by locating them on the 'departures' side of the station), given that commuters are under greater time-pressure in the morning.
- *Designed and installed to suitable standards* (we recommend the Dutch 'Fietsparkeur' standard⁵) and *well maintained*. We know of injuries at Sevenoaks station due to poor quality cycle parking equipment and installation, requiring the whole facility to be replaced after just 3 years of use.
- *Easy and safe to use*, without causing a risk of injury either due to the need for awkward lifting movements, or the risk of injuring one's head on double-deck cycle parking racks that are too close together.
- *Secure* – either guarded, overlooked by station staff or covered by CCTV surveillance. For storage facilities, we recommend the development of access control systems which can be used at multiple sites (ideally we'd wish to see a single national access system), while ensuring that those who enter the storage area can only leave with the bike they brought in to the area. This can be achieved by means of tamper-proof RFID tags that are securely fitted to the bike.
- *Sheltered*
- *Useable by as many types of pedal cycle as possible*, including the range of non-standard pedal cycles used by people with disabilities
- *Managed* – with abandoned and damaged cycles being periodically removed (after leaving notice of the intention to do so). This is particularly important where cycle parking space is at a premium and/or where cycles may be left for long periods.

Use of parking should be carefully monitored to determine whether there is sufficient parking in the right place. As a rule of thumb, Transport for London recommends that additional cycle parking should be provided when the existing parking is regularly reaching 80% utilisation. Similarly, if cycles are being parked on railings while 'official' cycle stands are being neglected, this is a clear sign that the latter are in the wrong place.

Cycle hire facilities and integration with hire-bike schemes

Cycle parking is already a very efficient use of valuable space in or near stations, but cycle-hire facilities can be a good deal more space-efficient than conventional cycle parking.

[Examples to follow].

3. CYCLE SPACES ON TRAINS

Cycle carriage policies

We have previously acknowledged that the main measure to substantially boost cycle-rail travel will be the provision of cycle parking and storage at stations. Yet the ability to carry pedal cycles on trains is important to some customers, particularly those making recreational journeys.

⁵ www.fietsparkeur.nl/over-fietsparkeur

Making provision to carry cycles on less crowded train services can also be very important to rural economies, and indeed to the economic viability of train services in those areas.

Examples of 'unrestricted' carriage:

- In Britain, Merseyrail allows cycle carriage on all its rail services at all times
- Elsewhere: unrestricted cycle carriage is also possible on Copenhagen's regional 'S-Tog' trains and on those run by the Californian operator Caltrain.

Examples of sensible restrictions:

- South West Trains (a franchise now operated by South Western Rail) developed a sensible cordon-based cycle restriction policy, in consultation with Cycling UK. It allows passengers to board or alight trains at the country end if (a) making short journeys where the service is not full (i.e. before it approaches a city centre in the morning peak, or after it leaves the city in the evening), or (b) to continue right through to the city centre terminus (Waterloo). However it prevents passengers from boarding or alighting at intervening stations, when the service is full and standing.

It is important that cycle restriction policies are informed by surveys and stakeholder consultation to identify journey patterns, and thus to tailor restrictions so they do not exclude cycle-rail journeys that don't actually delay services or cause problems for other passengers.

Design of cycle spaces

Cycle spaces on trains need to be easy to use, including by people who are short, frail or those with disabilities. How this is best achieved depends on the type of train:

- On trains which are hauled by a separate locomotive, there is normally ample space for cycles in the 'guards van' area.
- On longer-distance trains without locomotives, the doors are typically located at or near the ends of each carriage. It is better that they are near (rather than at) the end, allowing space to be provided for cycles, tip-up seating or other luggage between the doors and the end-wall of the carriage.
- On local trains designed for regular stops (i.e. where the speed of passengers boarding and alighting is critical, and where seating is less critical), there are normally double-doors near the centre of the train, and plenty of standing room around the doors. For this arrangement, the preferred option for cycle carriage is flexible space just inside the doors that can also be used as standing room at peak hours.

One wholly unacceptable, yet common, arrangement, is the use of hanging hooks to suspend bicycles vertically. This is particularly problematic where the bike has to be hung up in a tight space (as is all too often the case). Such arrangements not only result in bikes swinging uncontrollably (potentially causing damage to another bike on an adjacent hook), but they are also impossible to use by people with disabilities – or those who are frail, or short – particularly if they are travelling with a loaded bicycle. Even for taller and more able-bodied passengers, it is highly awkward to have to board the train (without delaying the train), then remove the luggage and then manoeuvre a bike onto a hanging hook in a tight space, particularly if there is already another bike on an adjacent hook.

A better arrangement for making efficient use of space is to provide a rail which guides the front wheel up to the hanging hook. The rail then stabilises the bike from swinging – with the bike being in any case more stable because its centre of gravity is now pushing it onto the rail, rather than being suspended directly below the hanging hook.

Examples of good design

a) Local trains with central double-doors:



Merseyrail's new Stadler trains allow up to 3 bicycles to be stored in a space adjacent to the central double-doors. When not in use, the space can be used flexibly e.g. for storing buggies and other luggage, or as standing room at peak hours. Tip-up seats are also provided. A similar arrangement is used on South Western Rail's Class 455 trains.



Northern Rail's class 150 trains have cycle storage at one end of the carriage, with luggage storage above the cycle spaces. This arrangement also permits the carriage of non-standard cycles (e.g. tandems)

b) Longer-distance trains without locomotives



The Class 158 trains, operated by South Western Rail, Scotrail and others, have cycle spaces between the doors and the end of the carriage. This allows bikes to be unloaded and stored easily, and to be loaded again before alighting. The space can also be used for luggage storage, as well as allowing passengers to congregate around the door before alighting.

c) 'Guards van' storage on loco-hauled trains



The older loco-hauled Intercity 125 trains (both electric and diesel), as used by Great Western Rail (above), as well as on West Coast, East Coast and Midland Mainline services, all have cycle space in the guard's van area. This provides good capacity and security and is convenient to use.

d) International good practice

Some continental trains have considerably more cycle space than is available on any UK trains:



Cycle space on a German regional train

There are also examples of better designs of near-vertical cycle storage than anything seen in the UK

Examples of bad practice

Unfortunately, several recent train-fleets in Britain demonstrate really awful cycle storage arrangements.

a) Cross-country 'Voyager' trains



The Cross-Country 'Voyager' trains supposedly have space for 4 bicycles in two narrow compartments on either side of the corridor, adjacent to a door. However it is very difficult to manoeuvre a bike onto the hanging hooks in such a confined space when other passengers are trying to board or alight (all the more so if you also have to load or unload the bicycle), and impossible to fit in two bikes in each compartment unless they both have very narrow handlebars.

b) Great Western Rail 'Azuma' trains



The Azuma trains, which have recently entered service on the Great Western Rail (GWR) and London and North Eastern Rail (LNER) networks, also have terribly designed cycle hooks in a confined space. Having failed to design an arrangement that prevents the bikes from swinging around, the use of a separating bar between the two bikes only adds to the difficulties of loading and unloading them. In the photo above, a passenger needing to take out the bike nearer the side-wall would first have to remove the other bike, thereby also causing huge inconvenience to other passengers.

4. TICKETING AND RESERVATION SYSTEMS

Systems for reserving cycle spaces on trains need to balance two priorities. On the one hand, they need to provide certainty for passengers who need the certainty that they will be able to travel on a particular train. On the other, they should not limit users' flexibility for those who cannot make travel plans in advance, particularly on more regular services.

We propose the following key principles

- Reservation systems should be in place to allow cycle spaces to be reserved on any train service for which it is also possible to reserve seats;
- There should not be a requirement to reserve cycle spaces in advance, unless these reservations can be made up to the last minute, e.g. up to 10 minutes in advance of departure.

The second principle is becoming increasingly achievable as new train fleets come into service with electronic seat reservation systems, in place of the paper-based seat reservation slips that were used on older trains. The latter required seat reservations (and hence also cycle reservations) to be printed out before the train began its journey, which meant that reservations had to be made before midnight on the day before travel. By contrast, electronic reservation systems allow both seats and cycle spaces to be reserved even when the train is already on route.

Cycling UK is pleased, for instance, that TransPennine Express (TPE) has recently announced that passengers can now make cycle reservations (which are compulsory on TPE's longer-distance services) up to 10 minutes before the start of their journey, taking advantage of the electronic systems installed on their new intercity trains. This follows similar developments on Virgin West Coast, Great Western Rail and Cross Country trains.

The previous requirement for passengers to make cycle reservations on these operators' services at least 24 hours in advance particularly disadvantaged commuters, including season ticket holders. Despite being regular users, commuters often cannot be sure what time they will be travelling on any given day, e.g. whether they will be leaving work at 5.00, 5.30 or 6.00pm. This might force them to make cycle reservations on three different trains, thereby adding to the difficulties faced by their fellow cycle-rail passengers. It would also take up huge amounts of their own time and that of the ticket-office booking clerks – one passenger reported that she needed half an hour to make each week's worth of cycle reservations – causing lengthy queues at the booking office in the process.

Yet despite this improvement, it is still unnecessarily difficult to make online cycle reservations in advance. Some train operators which require cycle reservations on their services do not allow these to be made via their website – even though other operators' websites allow cycle reservations to be made not just on their own trains but on any other train services with reservable cycle spaces. But even on websites which do allow cycle reservations, it is impossible to check the availability of cycle spaces before choosing which train to travel on. Meanwhile, operators whose sites offer discounted tickets that are not available elsewhere are effectively excluding cycle users from these discounts if they have to go elsewhere to make a cycle reservation.

These issues ought now to be resolvable, by making use of the DARWIN customer information system, which provides real-time information on passenger loadings, seat availability and potentially also the availability of cycle spaces. With a bit of co-ordination between train operators, it should surely be possible to a consistent cycle reservation system, that passengers can access (a) in advance on any train operator's website or (b) at the station, with the system being updated if a previously reserved cycle space is not taken by the passenger who booked it. This would give train and passenger staff the flexibility to allow cycles to be carried even on trains

where a reservation had not been made, if the passenger had had their journey plans disrupted through no fault of their own (e.g. due to a previous missed connection).

A further step would be to enable hire-bikes to be reserved online in the same way as is possible for connecting bus tickets.

5. INFORMATION AND PUBLICITY

Rail operators should make greater efforts to ensure passengers know about the opportunities for making cycle-rail journeys, and any rules that they need to be aware of. This information needs to take three forms:

- Advance information and publicity, through websites and leaflets
- 'Live' travel information
- Information at stations and on trains.

Advance information and publicity to help people plan journeys

Train operators should publicise, via leaflets and their websites:

- The rules about when (and under what conditions) cycles can be carried on their services
- Public bike hire available at stations
- Opportunities to make recreational cycle-rail journeys, including journeys to stations where cycle hire facilities are available (e.g. for exploring a historic city, for making family cycle journeys in the countryside, for visiting mountain-bike centres etc.

'Live' information during the journey

Passengers should be able to see in 'real time' whether it is possible to carry cycle reservations on trains approaching the station they are travelling from. This can be very useful for those who have to replan their journeys, e.g. due to a missed connection.

Information in stations and on trains

Stations should have signing for the following purposes:

- For those cycling to the station, advising them of where they can park or store their pedal cycles
- For those arriving at the station by train, advising them of the routes out of the stations and onto any cycle route networks, and of any cycle hire facilities at or near the station.

6. STAKEHOLDER ENGAGEMENT

Train operators who wish to be proactive in promoting cycle-rail travel have found it is useful to set up a Cycle-Rail Forum, where they can engage with local communities, councils, cycle hire businesses and others, enabling these groups to feed into the development of their cycle-rail integration strategies and schemes. Good practice examples include the cycle-rail forums run by Northern Rail – which is now also attended by TransPennine Express – and by Scotrail.

7. RESEARCH, MONITORING AND REVIEW

Local and national Government, and train operators themselves, should play a more proactive role in commissioning research to assess potential demand for, and benefits of, cycle rail travel using their networks, and how it can best be accommodated. Passenger Focus should be more proactive in monitoring cycle use, and the satisfaction of cycle-rail passengers, on different operators' services.

A good practice example is the Train2Ride report, commissioned by Hitrans (the transport regional partnership for the Highlands and Islands region of Scotland) on cycle-rail potential in the West Highlands.⁶

The Rail Safety and Standards Board (RSSB) also needs to play a more proactive role in researching the business and/or safety case for cycle-rail improvements, e.g.

- Modelling the demand for cycle parking and hire, based on data sources such as season ticket purchases, passenger surveys and local travel demand models;
- The design of space-efficient solutions for on-train cycle carriage that can be used safely and conveniently by all types of cycles and by cyclists of all heights and physical abilities;
- Template arrangements for installing and managing cycle parking and hire schemes, including signage, managing abandoned cycles and security concerns;
- The design of safe wheeling ramps for flights of steps, which can be used safely and easily by all forms of cycle without impeding the ability of people with disabilities to use the handrails;
- The safe design and management of level crossings to prevent cycle falls when crossing the rails (particularly at more acute angles).

Cycling UK
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⁶ https://hitrans.org.uk/Documents/Train2Ride_Study.pdf/m=1