Cycle Parking Guidance

Liverpool City Region Combined Authority

LIVERPOOL CITY REGION COMBINED AUTHORITY

METRO MAYOR LIVERPOOL CITY REGION

Introduction

This section introduces the Cycle Parking Guidance and outlines the purpose of the document, and what the remaining five parts contain.

Contents:

- Purpose of this Document
- Summary of Contents

Introduction

Purpose of this Document

Cycle parking is a crucial component of building a world class cycle network. High-quality, secure and convenient cycle parking at home, work, and everywhere in between influences the decision on whether to cycle or not. This Cycle Parking Guidance explains the best way of providing and maintaining cycle parking across the Liverpool City Region.

The ultimate intention of this document is to standardise the quality of cycle parking that is delivered across the Liverpool City Region, ensuring that our six local authorities have the information at hand to assist them with providing high-quality, consistent and fully accessible cycle parking for their residents, visitors and businesses.

This Cycle Parking Guidance was developed by the independent transport consultancy Steer, and draws upon their wide-ranging experience of cycle parking and cycle hub development, as well as a detailed review of published cycle parking guidance documents from the UK and beyond.

The Guidance Document is split into sections, covering six crucial aspects to delivering high quality cycle parking:

The principles of good cycle parking are covered within Part 1. This section describes the key aspects that make cycle parking 'good' and why that is the case. These principles are informed directly by central government design guidance.

Part 2 provides guidance on selecting the right type of cycle parking. This section acts as a form of toolkit in selecting best practice cycle parking, and outlines the various options for long and short stay cycle parking

Guidance on the most suitable cycle parking by destination is outlined within Part 3. While a Sheffield stand may be the ideal solution to short stay cycle parking outside of a shop, it is less suitable for overnight stays. This section outlines a number of best practice cycle parking solutions and how these should be used across different land uses.

Part 4 explains the financial aspects involved in delivering cycle parking, and sets out indicative costs for purchasing and installing various types of cycle parking.

Accessibility and inclusive design is crucial to ensuring that cycle parking can be used by all. Part 5 covers this, and outlines access considerations and design guidance to ensure inclusivity.

Finally, management and maintenance of cycle parking is covered in Part 6. This section outlines the maintenance requirements for high-quality cycle parking, as well as guidance on managing users, demand, and ongoing costs for cycle parking hubs and residential cycle hangars.

Introduction

Summary of Contents

Part 1: Principles of Good Cycle Parking

This section introduces the six key principles of good cycle parking, informed by current best practice cycle parking guidance documents.

Contents:

Principles of Good Cycle Parking

The principles described here act as standards for the design, delivery and management of cycle parking. They are integral to creating a default position where high-quality cycle parking is delivered across the Liverpool City Region.

The most recent guidance regarding high quality cycle parking infrastructure is presented within central government's Local Transport Note 1/20: Cycle Infrastructure Design (commonly referred to as LTN 1/20). LTN 1/20, published in 2020, states that cycling infrastructure should be designed to achieve the following five design criteria:

- Coherent
- Direct
- Safe
- Comfortable
- Attractive

While these principles are primarily aimed at the design of on-road protected cycling infrastructure, they equally apply to cycle parking.

In addition to LTN 1/20, a number of other cycle parking guidance documents have been published in recent years, including:

- Bicycle Association's Standards for Public Cycle Parking (2021)
- Transport for London's London Cycle Design Standards (2014)
- Greater Manchester Cycling Design Guidance & Standards (2014)
- CIVITAS/City of Amsterdam Inner City Bicycle Parking Best Practices (2021)

Despite some of these documents being developed locally, the general guidance they provide on the design of cycle parking remains highly relevant to the Liverpool City Region.

This section synthesises the guidance presented within each these guidance documents, as well as LTN 1/20, and sets out six key principles for delivering 'best practice' cycle parking for the Liverpool City Region. The six principles are listed below and described on the following pages:


Safe and secure


Accessible and Inclusive for All


Coherent


Attractive


Standardised in Quality


Catering for Demand

Principles of Good Cycle Parking

Safe and Secure

Cycle parking should be secure for the cycle and users should feel safe from the risk of personal crime. Delivering secure cycle parking will give people the confidence to leave their cycle without worry, creating the opportunity for a broader range of trips to be made by cycle, such as long-stay trips, and for people to use higher value cycles e.g. e-cycles.

Inclusive and Accessible to All

Cycle parking should be easy to use and accessible to all users and types of cycles. Often, the best options are those which are simple and flexible enough to meet a broad range of users. People, particularly those new to cycling, may be deterred by parking options that are difficult or complex to use. Furthermore, not all users will be capable of making the range of movements required for some cycle parking options especially those requiring heavy lifting or difficult manoeuvring of the bicycle (such as two tiered racks).

To accommodate the broadest range of users, cycle parking should be ergonomic and have provisions for different types of cycles. This means ensuring that there is adequate space for manoeuvring in and out of spaces, and that access is step-free. This extends to the access of the cycle parking facility itself, which should be fully accessible such as with dropped kerbs or power-assisted/automatic doors. LTN 1/20 states that a proportion of cycle parking (typically 5%) should be provided for non-conventional cycles e.g. adapted cycles or cargo bikes.

Coherent

Cycle parking should be well-connected to cycle routes and key destinations, easy to find, and ideally be well-signposted. This ensures maximum utility of cycle parking in locations where people need it most. Cycle parking where it is possible to cycle right up to the stands and that is close to the destination e.g. the main entrance to a workplace, is likely to be more in demand than provision that is less convenient to use.

Cycle parking which is not well-connected to the cycle network may be underutilised, and people are more likely to use informal ad hoc parking instead (e.g. attaching their cycle to railings or lampposts), which can pose an accessibility issue in certain locations.

Principles of Good Cycle Parking

Attractive

Cycle parking should be of good quality design and well-maintained. This is especially important in areas of architectural or heritage significance (for example, the Albert Docks), or at cycle hubs which charge a membership fee.

Highly visible, good quality cycle parking is an important tool in communicating that cycling is a normalised and prioritised mode of transport.

Standardised in Quality

Cycle parking should be standardised in quality across the city region, where all major destinations have strong provision for cycle parking that meets the needs of all.

Doing so will reduce the complexity of making cycle trips as users will have the confidence to make a trip by cycle in the knowledge that there is a good standard of cycle parking provision within easy reach of their destination.

Catering for Demand

There should be enough spaces to cater for future demand, particularly in areas that have been identified for growth, or those on strategic cycle connections within the Liverpool City Region.

Cycle storage should also be designed to ensure adaptability in response to future trends such as growth in e-cycle and e-scooter usage.

Part 2: Selecting the Right Type of Cycle Parking

This section acts as a toolkit of best practice cycle parking, and outlines the various options for long and short stay cycle parking at various locations, as well as examples of sub-standard cycle parking to be avoided.

Contents:

Selecting the Right Type of Cycle Parking

Introduction

This section describes the recommended types of cycle parking to be provided across the Liverpool City Region, focusing on best practice solutions for short and long stay users.

'Best practice' cycle parking is accessible to the widest range of users, and provides the ability to secure both wheels and frame, as well as providing support to the cycle.

Short stay cycle parking

The primary function of short-stay cycle parking's is to cater for swift, 'in-and-out' trips. Short stay parking should be included at virtually all destinations, and should be convenient and readily accessible. The following short stay solutions are covered:

- Sheffield stands / M-stands
- Street furniture cycle parking
- Cycle parking planter
- Two-tier stands

Long stay cycle parking

Long stay cycle parking is intended for lengthier stays, for example during work hours, or throughout the night. Because cycles are left for longer periods, long stay parking should have additional security features such as being situated within a lockable compound, and place greater emphasis on protecting cycles from the elements e.g. the stands are covered or indoors. The following long stay solutions are covered:

- Secure shelters and compounds
- Residential cycle hangars

Cycle hubs

Cycle hubs are larger, dedicated storage space solutions. They can be used for both short and long stay purposes, and are commonly seen at public transport interchanges, or within town and city centres. Due to their varying potential uses, this category has been divided into the following three hub types:

- Cycle hubs
- Active travel hubs
- Community active travel hubs

Each of these types of cycle parking are described within this section, along with their respective strengths and limitations.

Sheffield and M-stands Short stay

Description

Used widely across the UK, Sheffield stands are tubular metal stands which allow users to lock their wheel and frame to the stand. These stands can be banked together or used singularly depending on space and the level of demand. Both sides of each stand can be used to secure a regular cycle. These stands should be concreted into the ground, not bolted, and located at least 0.8 metres away from obstacles like walls.

The M-stand is less commonly used, however is arguably more accessible than the Sheffield stand. The M shape encourages secure locking of both wheels and frame, and is particularly useful for cycles with 'step through' frames.

Strengths	Limitations
• Familiar and easily understood by users • Easy, low cost, and versatile to install • Easy to secure cycle – including both frame and wheels	• Vulnerable to attack if not further secured (i.e. within a compound, or coupled with CCTV) • Can add to street clutter which may cause difficulties for people with visual or physical impairments

Overview

User type	Primarily short stay, flexible, & publicly accessible (unless used as part of a hub or secure compound).	
Cost per unit	£ £ £ £ £	£70-£300 (plus installation costs)
General suitability	✓ ✓ ✓ ✓ ✓	Simple to use, highly adaptable
Security	✓ ✓ ✓ ✓ ✓	Can lock both wheels to frame
Retrofit ability	✓ ✓ ✓ ✓ ✓	Easy to install and retrofit
Accessibility	✓ ✓ ✓ ✓ ✓	Can accommodate most cycle types

Recommended dimensions

To ensure that people can manoeuvre their cycles in and out of Sheffield/M-stands, it is important to get the spacing and siting correct. Cycle parking should be accessible to all users and for all types of cycle.

LTN 1/20 (Chapter 11: Cycle Parking and Other Equipment, p.135) sets out recommended and minimum dimensions for banks of Sheffield and M-stands. These are outlined within Table 2.1.

Consideration should also be given to the specific location of cycle parking. Cycle parking should not be located on uneven surfaces, or in locations that make it challenging to easily move a cycle in our out of the stand.

Table 2.1: LTN 1/20 design guidance

Criteria	Recommended	Minimum
Bay length (length of cycle parked on stand)	2m	2m
Bay length (tandems and other non-standard cycles)	3m	2.5m
Access aisle width (if larger cycles use the end bay only)	3m	1.8m
Access aisle width (if larger cycles use internal bays)	4m	3m
Edge access aisle + one bay to the side	5-6m	3.8-5m
Central access aisle + one bay to the side	7-8m	5.8-7m
Spacing between stands	1.2m	1m
Gap between stand and wall (part of bay width)	700mm	500mm

Source: LTN 1/20

Sheffield and M-stands Short stay

Top left and right: M-stands located within the public realm. Stands are concreted into the ground for maximum security. Sufficient space is provided around them to accommodate a range of cycles.

Bottom left and right: Rows of Sheffield stands, located at cultural and leisure destinations. Due to the appropriate spacing between stands, and the space at each end, a variety of cycles can be securely locked up.

Street furniture cycle parking Short stay

Description

Street furniture cycle parking consists of attachments to existing street furniture in order to make them suitable as cycle stands – these are most commonly attached to lampposts. The parking is comprised of a metal circle which is clamped onto the object, allowing people to lock their cycle against it.

Due to their smaller size, it can be difficult to lock both wheels and frame securely to the cycle parking. The key benefit of these attachments is providing additional security to street furniture which is already used as ad hoc cycle storage.

Strengths	Limitations
• Familiar and easily understood by users • Easy, low cost, and versatile to install • Does not add additional street furniture	• Vulnerable to attack if not further secured (i.e. within a compound, or coupled with CCTV) • Context specific – not suitable for all street furniture as it could block the footway. This should only be considered if footways have sufficient space.

Overview

User type	Primarily short stay, flexible, & publicly accessible	
Cost per unit	£ £ £ £ £	£50-£200 (plus installation costs)
General suitability	✓ ✓ ✓ ✓ ✓	Simple to use, though limited in use
Security	✓ ✓ ✓ ✓ ✓	Difficult to lock both wheels to frame
Retrofit ability	✓ ✓ ✓ ✓ ✓	Easy to install and retrofit
Accessibility	✓ ✓ ✓ ✓ ✓	Can accommodate a range of cycle types

Street furniture cycle parking Short stay

Left: An example of street furniture cycle parking in Islington, London. Utilising an existing signpost, this attachment has created a convenient place for someone to park their cycle within a residential area. This can be particularly beneficial for visitors.

Cycle parking planter Short stay

Description

These stands are planters with attached loops to which you can lock a cycle. Increasingly popular in town and city centres, their dual purpose as bike lock and planter can enhance the streetscape and save space.

As they are grounded in place due to their weight, they do not require any civil works to install. However, they can also be drilled into the ground for additional security.

Strengths	Limitations
• Low cost • Enhances streetscape and serves purpose when not in use by cycles • Versatile and easy to install – option to secure to ground or by weight of planter itself • No civil works required to install	• Vulnerable to attack if not further secured (i.e. within a compound, or coupled with CCTV) • Context specific – not suitable for all street furniture as it could block the footway

Overview

User type	Primarily short stay, flexible, & publicly accessible	
Cost per unit	£ £ £ £ £	£250-£600 (plus installation costs)
General suitability	✓ ✓ ✓ ✓ ✓	Simple to use, though limited in use
Security	✓ ✓ ✓ ✓ ✓	Can lock both wheels to frame
Retrofit ability	✓ ✓ ✓ ✓ ✓	Easy to install and retrofit
Accessibility	✓ ✓ ✓ ✓ ✓	Can accommodate a range of cycle types

Cycle parking planter Short stay

Left: Cycle parking planters outside of a pub. Positioned on the carriageway, these planters provide a flexible option for cycle parking, while also improving the public realm.

Two-tier stands Short stay

Description

Two tier stands are a high-density option for locations with high demand and limited space. Individual stands consist of a runner for the bicycle wheels to sit in, as well as supporting frames which hold the bike steady and provide a surface to attach the lock to.

The upper tier is pulled out and down allowing the user to push their bike onto the runner, then lift it back into place on the top rack. More expensive options provide some counterbalancing or hydraulic assistance to make this process easier.

Strengths	Limitations
• Highest density of cycle parking • Prevents overspill of cycle parking – i.e. ad hoc to street furniture by providing increased capacity for peaks • Can protect cycles from the elements if installed with a roof	• Vulnerable to attack if not further secured (i.e. within a compound, or coupled with CCTV) • Not suitable for all types of cycle, particularly upper tier spaces • Requires a relatively large amount of space

Overview

User type	Primarily short stay, flexible, & publicly accessible	
Cost per unit	£ £ £ £ £	£150 upwards, size dependent
General suitability	✓ ✓ ✓ ✓ ✓	Good for high demand locations
Security	✓ ✓ ✓ ✓ ✓	Can lock both wheels to frame
Retrofit ability	✓ ✓ ✓ ✓ ✓	Large footprint can limit suitability
Accessibility	✓ ✓ ✓ ✓ ✓	Not suitable for all types of cycle

Two-tier stands Short stay

Above: Two tier stands located outside of a rail station. Offering high density, convenient short stay parking in a location with significant peak periods.

Secure shelters and compounds Short stay

Description

Secure shelters and compounds consist of basic cycle stands such as Sheffield or two tier stands, with additional protection from weather and damage. They may be open and freely accessible to the public, or may have controlled access by keycode, fob, or other means.

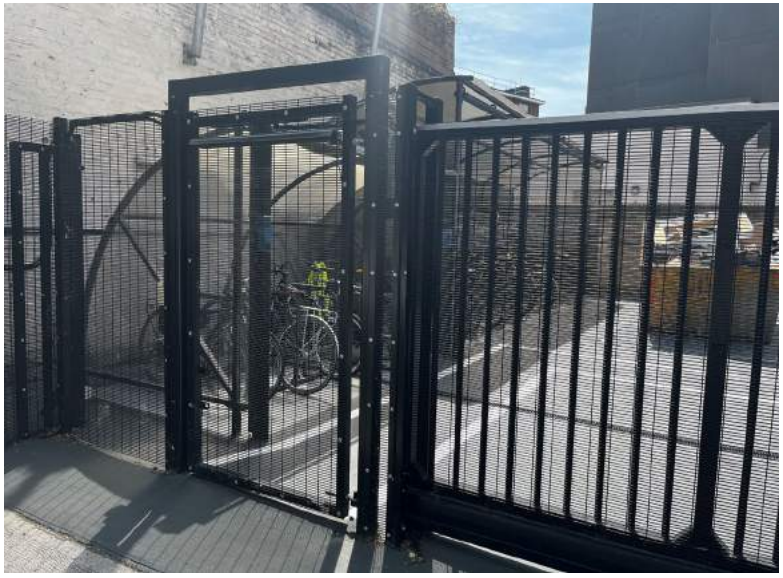
These vary greatly in size and design and can range from a small caged or plastic shed to a larger area such as a courtyard behind a gate. Secure compounds could also be retrofitted into locations such as a multi-storey carpark.

Strengths	Limitations
• Higher security than on-street cycle parking • Can accommodate a broad range of cycles with the correct internal design • Can protect cycles from the elements if installed with a roof	• Requires a relatively large amount of space • Consideration required regarding access – and messaging/design to ensure door is properly locked between uses • Larger compounds have increased security risk as more people have access

Overview

User type	Suitable for both short and long stay, can be secured within a compound or cycle hub	
Cost per unit	£ £ £ £ £	£2,000-£9,000 – highly variable
General suitability	✓ ✓ ✓ ✓ ✓	Suitable only in select locations
Security	✓ ✓ ✓ ✓ ✓	Offers good level of security
Retrofit ability	✓ ✓ ✓ ✓ ✓	Large footprint can limit suitability
Accessibility	✓ ✓ ✓ ✓ ✓	High if internal is designed well

Secure shelters and compounds Short stay



Left: A free-standing secure cycle shelter, accessible by lock and key and sheltered from the elements.

Below: A secure cycle compound within the perimeter of a commercial building. Access is gained via a keyfob, and cycles are sheltered from the elements under a internal cycle shelter.

Residential cycle hangars Long stay

Description

The residential cycle hangar is a tried and tested on-street secure cycle parking solutions. The hangar stores six bikes within half the space of a standard car parking bay.

The structure is made of a galvanised steel frame with a gas sprung door. Each hangar is fitted with a corrosion resistant, tamper proof lock, as well as a vandal resistant door catch. The side panels are comprised of perforated steel for additional security.

Strengths	Limitations
• Secure storage of bicycle on the street – controlled by lock and key • Small number of cycles in each hangar allows for more secure control of access • Visible addition to street communicating normality of cycling and encouraging others to consider it	• May require conversion of road space/motor vehicle parking • Relatively high initial outlay to purchase the hangar

Overview

User type	Long stay, managed by membership	
Cost per unit	£ £ £ £ £	£3,000-£5,000 (plus installation costs)
General suitability	✓ ✓ ✓ ✓ ✓	Suitable only in select locations
Security	✓ ✓ ✓ ✓ ✓	Offers good level of security
Retrofit ability	✓ ✓ ✓ ✓ ✓	Smaller than a car parking space
Accessibility	✓ ✓ ✓ ✓ ✓	Not suitable for all types of cycle

Residential cycle hangars Long stay

Top and bottom left: The latest model of Cyclehoop's Bikehangar® 4.0 on street in Westminster, London. Each hangar takes up roughly the space of one car parking space and can hold 6 bicycles. Cyclehoop's standard Bikehangar colour is green, but they are able to powdercoat the panels to any colour. These pictured were coloured black at the request of Westminster Council.

Above: FalcoPod bike hangars, on street in Camden, London. The bike hangar is a robust on-street cycle parking solution designed to meet the needs of cyclists who don't have access to private cycle parking facilities within their home.

Cycle hubs Long stay

A cycle hub can refer to a facility with a relatively wide range of different amenities. While some cycle hubs are only intended to provide a basic space for cycle parking, others are better equipped to provide a wider offer.

New, freestanding cycle parking structures can also offer an opportunity to include features such as solar panels or green roofs. Cross-department and wider stakeholder engagement will be important in identifying these co-benefits and ensuring that a maintenance plan can be put in place.

This section sets out three types of cycle hubs: standard cycle hubs, active travel hubs and community active travel hubs. A three-tier definition of cycle and active travel hubs is outlined below.

Standard cycle hub

There are certain minimum criteria which define a cycle hub facility (and differentiate it from simply being described as cycle parking):

- A number of cycle parking spaces, minimum 30 spaces
- Covered from the elements
- Secure access (via a swipe card, key fob or staffed entrance)
- CCTV security monitoring

Cycle hubs can be either freestanding structures or retrofitted from an existing unit. Cycle hubs are best located in high use areas such as public transport hubs or city centres.

Case study: West Midlands Cycle Hubs

The West Midlands Combined Authority have five cycle hubs across the region, located at Birmingham New Street, Selly Oak, Longbridge, Stourbridge Junction and Rowley Regis rail stations.

Each of the cycle hubs provide around 30 cycle parking spaces, hosted within two-tier racks. The hubs offer fully-covered storage, 24-hour smartcard access, CCTV as well as emergency help points.

Case study: Waltham Forest Cycle Hubs

Waltham Forest, a borough in north-east London, has eight bespoke secure cycle hubs at stations across the borough. Each of the cycle hubs are managed in-house by the council. The cycle hubs each contain CCTV, key fob entry, help points, enhanced lighting and two tiered user friendly assisted cycle parking racks.

In addition, the hubs have cycle pumps inside as well as complementary Sheffield stands nearby, making parking a cycle easy and convenient.

Active travel hubs

Active travel hubs build upon the basics of a cycle hub by providing certain additional facilities or services, which can include:

- Lockers for users' possessions
- Changing rooms / showers
- Maintenance tools on site
- Maps and information on local active travel routes and destinations
- Cycle hire availability
- Vending machines

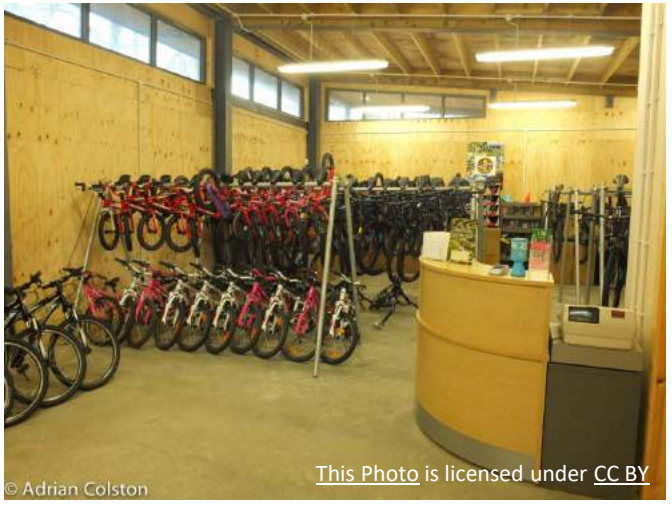
As with cycle hubs, active travel hubs can also be either freestanding or located within existing units.

Community active travel hubs

Community active travel hubs can encompass all the possible facilities outlined in the previous two definitions but also have a broader potential scope.

It is possible that they do not include cycle parking; instead having more of a community remit where they not only provide infrastructure or facilities to support active travel but focus on providing information and support to people to make more active or sustainable travel choices. An active travel hub may include:

- Staffing – whether providing personalised travel planning advice, security or as part of a bike shop
- Bike shop – offering servicing, new parts and bikes
- A café
- Support local events
- Dr Bike sessions
- A community bicycle workshop / bicycle recycling project
- Cycle loan scheme
- Provide local knowledge on public transport options



Selecting the Right Type of Cycle Parking

Substandard cycle parking

While every type of cycle parking will have pros and cons, certain types of provision are particularly poor, and are generally not recommended for use within the Liverpool City Region.

‘Butterfly’ cycle parking racks

These racks are typically bolted into the walls of buildings and are used to secure the front or rear wheel of a bicycle. An example of this can be seen on the two pictures below, on the left.

This type of cycle parking does not provide adequate support to the cycle, and does not allow for securing of both wheels and frame.

This leads to numerous issues, including cycles falling or being knocked over and damaging the wheel, and theft of wheels from the frame. This type of cycle parking is not fit for use, and therefore not recommended.

Vertical cycle parking (above), butterfly cycle parking (below)

Vertical cycle parking stands

Careful consideration should also be given to use of vertical stands. While these stands do offer a higher density of cycle parking and can assist with saving space, they are also challenging (and sometimes impossible) to use for many types of cycles.

To use the stands, people are required to hoist their cycle onto the rear wheel and then lock into place. For tricycle, cargo bike or other non-standard cycle users, this is not possible.

The stands are also challenging to use for people with heavier standard cycles, or those unable to physically manoeuvre their cycle onto its rear wheel.

If vertical stands are to be used, it is strongly recommended that they are complemented with a number of accessible cycle parking spaces such as Sheffield stands.

Part 3: Most Suitable Cycle Parking by Destination

This section sets out the most suitable cycle parking for a range of destinations, and outlines priorities and minimum requirements for each land use.

Contents:

Most Suitable Cycle Parking by Destination

Destinations considered

This section provides guidance on the most suitable types of cycle parking for various destinations. The destinations considered within this section have been informed by LTN 1/20. The following destinations have been considered:

- Employment
- High streets, city and town centres
- Retail park
- Hospitals
- Educational institutions
- Public transport hubs
- Residential

A summary of the types of cycle parking recommended at each destination is presented within Table 3.1 on p.30.

Employment

Priority*:* providing secure, long stay cycle parking that keeps cycles safe from theft and the elements. Complementary short stay cycle parking close to the main entrance for visitors.

Cycle parking at workplaces will be used for long periods, therefore there is a need to prioritise security and protection from elements. Cycle parking should be secured behind a secure door and covered by CCTV, or have a high level of natural surveillance, i.e. located close to main entrances, with many vantage points of the cycle parking.

The parking should also be highly convenient to use, located as close to the staff entrance(s) of the building as possible, with direct access to the workplace from the cycle parking area. Parking should not be located up/down flights of stairs unless accompanied by a fully accessible lift.

Consideration should be given to providing changing, shower and locker facilities in new or refurbished office buildings to support cycle commuting.

For office buildings, short-term parking (in the form of Sheffield stands, or similar) should be provided to accommodate visitors so that they do not need to use the same facilities as employees.

High streets, city and town centres

Priority: providing easy access cycle parking for short stay visits, with plentiful cycle parking dispersed throughout the area near key destinations and points of interest. Long stay, secure, sheltered parking provided for workers.

As outlined within LTN 1/20 (Chapter 11: Cycle Parking and Other Equipment, p.137), cycle parking in town centres is likely to cater for shoppers or those undertaking social or leisure activities.

Short stay parking should be located on-street, as close to shop entrances as possible. Unplanned or badly planned cycle parking of this type in town centres has the potential to distract from visual amenity at best, and present an obstruction at worst.

Careful consideration should be given to the siting of stands. Stands should not be

Most Suitable Cycle Parking by Destination

placed where they obstruct the flow of pedestrian traffic or reduce available footway width for pedestrians beyond the recommended minimum. In conservation areas, or areas of historic significance, bespoke designs may help minimise the visual impact.

Local centres also offer a strong opportunity to raise the visibility of cycling and provide other active travel services through cycle hubs.

Retail parks

Priority: providing secure, long stay cycle parking that keeps cycles safe from theft and the elements. Short stay cycle parking close to the main entrance of shops for visitors.

Due to their fringe locations, the primary users of cycle parking in retail parks are likely to be employees.

As with 'Workplaces', cycle parking at retail parks will be used for long periods, therefore there is a need to prioritise security and protection from elements.

Cycle parking should be secured behind a secure door and covered by CCTV, or have a high level of natural surveillance, i.e. located close to main entrances, with many vantage points of the cycle parking.

Short stay parking should also be provided for those shopping by cycle, located as close as possible to the entrance to each shop.

Hospitals

Priority: providing secure, long stay cycle parking for workers that keeps cycles safe from theft and the elements. Short stay cycle parking close to visitor entrances.

Hospitals are major employers, with varying shift patterns that make cycling an essential mode of transport for many. It is vital that workers are provided with a safe place to park their cycle while at work.

Staff cycle parking should be separated from visitor parking wherever possible as cycle parking open to the public increases the chances of theft. Publicly available cycle parking also increases the likelihood of the capacity being reached and staff not being able to park their cycles securely.

Secure compounds or cages can provide high capacity and secure parking locations for staff. A high quality example is presented below, located at Kingston Hospital, a 78 capacity timber cycle shelter, accessible only to NHS staff via their personal key card.

Image credit: Turvec

Visitor parking should also be secure, well-lit, and ideally monitored by CCTV. Parking should be located as close to visitor entrances as possible, and accessible to a range of cycles.

Most Suitable Cycle Parking by Destination

Educational institutions

Priority: providing secure, long stay parking which keeps cycles safe from theft and weather for staff as well as shorter-stay options at points of interest for visitors and students.

Universities and further education institutions

Major sites such as university campuses or large colleges should provide long stay cycle parking for staff and students, as well as short-stay parking close to destinations within the campus.

By their nature, universities and colleges will experience peaks of demand throughout the day as students move between lectures. To accommodate this demand, higher density short-stay cycle parking should be considered such as two-tier stands, or banks of Sheffield or M-stands.

Given their scale, campus universities and further education institutions may have space within their estate to accommodate cycle parking on site. Where possible, this should be prioritised for long stay cycle parking, with controlled access (i.e. key fob) and CCTV surveillance.

In the public realm, Sheffield or M-stands should be dispersed across site for short-stay visitors near to places of interest.

Primary and secondary schools

Cycling can make an important contribution to children's daily activity levels, and trips switched to cycling can help reduce congestion and improve air quality by reducing the number of school-run vehicles. Transport for London research has shown that good quality cycle parking at schools has been proven to increase the numbers of students cycling.

As cycles will be locked up for the majority of the day, cycle parking should be covered and within the school grounds for security.

Rail or bus stations

Priority: providing secure, long stay parking which keeps cycles safe from theft and the elements.

Integration of cycling with public transport is vital in order to create the conditions whereby people feel that they can leave the car at home and take the bus or train.

Cycle parking at stations needs to be as convenient and secure as possible. Cycle parking should be located at the main entrance to the station, or behind the gate-line for additional security. As cycles are likely to be left all day, and potentially overnight, shelter should be provided from the elements.

Cycle hubs can work well at busy stations and interchanges. Cycle hubs also present the opportunity to offer cycle repairs and retail.

Specific design guidance for cycle parking at railway stations can be found within the '*Standards for Public Cycle Parking (June 2021)'* guidance document, developed by the Bicycle Association (BA) and Cycle Rail Working Group (CRWG). This guidance document provides information on purchasing, installing and managing public cycle parking at stations.

Most Suitable Cycle Parking by Destination

Residential cycle parking

Priority: Without adequate and convenient cycle parking at home, people are less likely to cycle. Therefore, ensuring high quality cycle parking is provided at home is crucial because so many journeys start and end there.

The most suitable type of cycle parking for residential settings may depend on the housing type and whether homes are in a new development or established streets.

New housing developments

As outlined within LTN 1/20 (Chapter 11: Cycle Parking and Other Equipment, p.139), best practice is to provide dedicated cycle parking as outlined within the National Planning Policy Framework (NFFP). Please note that each local planning authority across the Liverpool City Region has their own standards and planning policy. This guidance should be followed in line with those standards.

Cycle parking should be should be located in the most convenient position possible to minimise the 'effort barrier' to people getting to and from their cycle. With the opportunity to build in cycle parking, new developments should include high quality provision from the outset as standard. For residents this should be covered with secure access.

In blocks of flats, secure cycle parking could be located within a basement car park provided that people can ride or wheel to the cycle parking, however the provision would be more accessible and visible if provided at ground level either in a unit within the apartment block or a secure, covered shelter in the grounds.

In new build houses – garages or a large cupboard with dimensions to accommodate equivalent to one cycle per bedroom. Developers should also consider the need for visitor or short stay cycle parking at points of interest on the development e.g. shops, health centres or leisure facilities.

If secure cycle parking is not provided, people are more likely to store their cycles within their homes or in communal stairwells. At worst, this can potentially create a hazard in event of a fire or other emergency, and at best, is likely to deter people from cycling as much or as often due to the increased effort required to get out onto the street.

Existing houses and flats

The priority streets for residential cycle parking are those with terraced houses and/or flats. Terraced houses or older/conversion flats may have less internal storage for cycles and it may be more difficult to access back gardens or yards from the street than semi-detached or detached houses.

The most common solution for residential cycle parking in these situations is on-street cycle parking hangars. These hangars are easily retrofitted on street, or within estate grounds, and offer a secure and convenient solution to parking a cycle.

For residential blocks (e.g. older social housing), with undercroft or underground car parking, consideration should be given to reallocating space for cycle parking, subject to existing demand for car parking. Secure compounds within these spaces are relatively low cost to construct, and can offer a good alternative to on-street cycle hangars.

Most Suitable Cycle Parking by Destination

Table 3.1: Most suitable cycle parking by destination

Destination	Cycle Parking Type							
	Hubs (short and long-stay)			Short-stay		Long-stay		
	Cycle hub	Active Travel Hub	Community Active Travel Hubs	Street furniture (planters, lamp posts etc.)	Sheffield stands	Residential cycle hangars	Two-tier stands	Shelters and compounds
Employment		✓			✓		✓	✓
High streets, city and town centres	✓	✓	✓		✓		✓	
Hospitals	✓	✓			✓		✓	✓
Retail parks						✓	✓	✓
Existing housing (terraced, semi-detached, detached)				✓	✓	✓		
Existing housing (flats)					✓	✓	✓	✓
New housing developments (terraced, semi-detached, detached)					✓	✓	✓	✓
New housing developments (flats)					✓	✓	✓	✓
Educational institutions	✓	✓	✓	✓	✓		✓	✓
Public transport hubs	✓	✓	✓		✓		✓	✓

Quantity of Cycle Parking Required

Guidance for the minimum quantity of cycle parking to be provided at a range of land uses is published in LTN 1/20. A summary of this guidance is presented within Table 3.2.

LTN 1/20 (Chapter 11: Cycle Parking and Other Equipment, p.133) states that a proportion of cycle parking, typically 5%, should be provided for non-standard cycles, i.e. take the form of Sheffield/M-stands or similar.

Table 3.2: Suggested minimum cycle parking capacity for different types of land use

Land use	Sub-category	Short stay requirement	Long stay requirement
All	Parking for adapted cycles for disabled people	5% of total capacity co-located with disabled car parking	5% of total capacity co-located with disabled car parking
Retail	Small (<200m2)	1 per 100m2	1 per 100m2
	Medium (200-1,000m2)	1 per 200m2	1 per 200m2
	Large (>1,000m2)	1 per 250m2	1 per 500m2
Employment	Office/Financial (A2/B1)	1 per 1,000m2	1 per 200m2
	Industrial/Warehousing (B2/B8)	1 per 1,000m2	1 per 500m2
Leisure and institutions	Leisure centres, assembly halls, hospitals and healthcare	Greatest of: 1 per 50m2 or 1 per 30 seats	1 per 5 employees
	Educational institutions	-	Separate provision for staff and students. Based on Travel Plan mode share targets, minimum: Staff: 1 per 20 Students: 1 per 10
Residential	All except sheltered/elderly housing or nursing homes	-	1 per bedroom
	Sheltered/elderly housing / nursing homes	0.05 per residential unit	0.05 per bedroom
Public transport interchange	Standard stop	Upon own merit	-
	Major interchange	1 per 200 daily users	-

Source: LTN 1/20

Part 4: Understanding the Costs

This section outlines indicative upfront and ongoing cost considerations for the toolkit of recommended cycle parking solutions. The section is divided into ‘off-the-shelf’ solutions, cycle hubs, and potential funding sources.

Contents:

Understanding the Costs

Introduction

This chapter provides information on the capital, construction and on-going costs involved for the cycle parking options outlined within Part 2: Selecting the Right Type of Cycle Parking.

The majority of cycle parking options recommended within this Guidance document are 'off-the-shelf' products, and can be purchased from a range of manufacturers. Indicative capital and installation are outlined for each of these products.

Cycle hubs, however, are a bespoke product which vary in cost depending on the size, complexity and materials chosen. Example costs have been presented through a number of case studies.

The costs outlined within this chapter have been informed through conversations with suppliers of cycle parking, as well as local authorities that have procured and installed similar products.

It should be recognised that due to the current volatile market conditions (as of July 2022), prices for cycle parking are fluctuating more than usual. As such, the prices provided within this document should only be used as a guide for costs.

What costs need to be considered?

Capital costs

Depending on the type of cycle parking, capital costs can vary significantly. For short-stay solutions, prices generally range from £50-£500 per unit, though for larger, bespoke solutions, this figure can rise ten-fold. Costs generally can be reduced if buying in bulk, therefore joint procurement with other authorities could be considered to achieve economies of scale.

While secure and sheltered options are the most expensive, they could be the difference between cycle parking that is successful and well-used, and cycle parking that is ignored.

Installation costs

Total cost will also be affected by installation costs, which will vary by location, local contractor rates, the extent of any ground work required, and whether any enabling work is necessary (such as clearing vegetation or existing structures).

Maintenance costs

Finally, consideration needs to be given to the ongoing costs associated with maintaining a functioning and high-quality facility.

For on-street solutions such as Sheffield stands, this will be as simple as clearing away abandoned cycles periodically, though for cycle parking with moving parts such as two-tier stands or cycle hubs, a more frequent maintenance schedule will be required.

Table 4.1 (overleaf) presents a summary of the capital, installation and maintenance costs of various types of cycle parking.

Understanding the Costs – Off the Shelf Cycle Parking

Table 4.1: Indicative costs of off the shelf cycle parking

Product	Cost per unit	Installation costs	Ongoing cost considerations
Sheffield & M-stands	£70 to £300	£500 per stand – this typically includes the cost of the unit	Sheffield stands are low maintenance and affordable to replace. The main ongoing costs are associated with removing abandoned cycles, checking for damage and removing litter or leaves.
Street furniture integrations	£50 to £200		Street furniture integrations have very low ongoing costs beyond the removal of disused cycles.
Cycle parking planters	£250 to £600		The maintenance of planting should be considered (though this could be included within other budgets e.g. parks/gardens).
Shelters and compounds	£2,000 to £9,000	Variable – typically included within overall cost per unit	Shelters and compounds can have long lifespans with some suppliers offering warranties up to 10 years. Shelters and compounds are more liable to maintenance costs due to moving parts i.e. doors and locks.
Residential cycle parking hangars	£3,000 to £4,000	£500-700 – typically included within the overall cost per unit	Hangars are costly to replace when they are vandalised or damaged. Management of membership, access, and distribution of keys is an ongoing resource requirement.

Understanding the Costs - Bespoke Cycle Hubs

Introduction

Cycle parking 'hubs' (including cycle hubs, active travel hubs, and community active travel hubs), vary widely in costs and prices are heavily dependent on scheme specific variables as well as the focus of the facility.

This section outlines a series of cycle hub case studies, showing the varying costs of delivering a broad range of types of cycle hubs.

Waltham Forest Cycle Hubs

Hub type: Cycle hub

Unit type: Freestanding, purpose built

Waltham Forest, situated in north-east London, have over 500 cycle parking spaces, serving over 850 members, across seven cycle hub locations. These hubs are freestanding and primarily serve rail stations and key retail centres.

Capital and operating costs

Waltham Forest Council estimate their total yearly operating costs at approximately £23k (£44 per space) and can be broken down as follows:

- £6k on cleansing, which is provided by the council's street cleansing team
- £13k on security (CCTV, alarms, and staff checks)
- £4k on administration and management of membership and fob access. This is approximately £4.50 per member per year
- As the cycle hubs are owned by Waltham Forest Council, there are no rental costs involved.

Waltham Forest charge members £35 per year for access to the scheme, and users can use any of the cycle hubs across the borough. The cycle hub scheme successfully covers its overhead costs each year.

Understanding the Costs - Bespoke Cycle Hubs

The Stockton-on-Tees Active Travel Hub

Hub type: Active travel hub

Unit type: Conversion of a retail unit

The Hub, located in Stockton-on-Tees, was the UK's first active travel centre, and for the past 10 years has been helping Stockton residents to keep active. The Hub was (and remains) funded by the Department for Transport and Stockton-on-Tees Borough Council.

The Hub is located in a large and prominent unit on the High Street, and has a capacity of 30 cycle parking spaces. Sustrans, the walking and cycling charity, operate and staff The Hub, and it acts as the base of their operations, with the charity based in the offices on the upper floors.

Capital and operating costs

The Hub works on a free membership basis, meaning there is no revenue stream – and the site is not self-sustaining. All costs are covered by Stockton-on-Tees Borough Council, including the initial renovation of £370,000 for the building and ongoing rent.

The operators estimated the basic maintenance costs for the parking facility to be around £1,000 per year.

Image credit: https://thehubstockton.com

Cleethorpes Cycle Hub

Hub type: Community active travel hub

Unit type: Conversion within train station

Located within Cleethorpes train station, the Cleethorpes Cycle Hub provides safe and secure indoor cycle parking, as well as repairs and cycle hire.

Cycle parking costs £1.50 per day, or alternatively £17.50 per month or £130 for a full year. Fob access provides users with 24/7 access, and lockers are provided for storing helmets and other personal items.

The hub is managed by Cycle Hub Lincs who are a Community Interest Group, focussed on getting people to try cycling.

Capital costs

Network Rail contributed £340,000 towards the refurbishment, with a further £50,000 provided by the Railway Heritage Fund. A large percentage of this cost went towards thermal dynamic panels, and air source heat pump and underfloor heating.

Image credit: https://www.cyclehublincs.org.uk

Funding Sources

Introduction

Depending on the location and type of parking provision a variety of funding sources may be available.

Potential capital funding sources

- Developer contributions such as Section 106, Community Infrastructure Levy
- Local authority budgets e.g. public health, Local Transport Plan
- Central government e.g. Department for Transport Access Fund, Capability Fund, or DEFRA funding aimed at improving air quality.. Depending on the funding stream, capital may be available to local authorities directly or via the Liverpool City Region Combined Authority.
- In-kind contributions e.g. provision of premises/land
- Local authority capital finance, including borrowing capital funding with repayment from the revenue raised through operations (such as user charges)

Potential sources of revenue

Revenue funding will be required to cover maintenance, upkeep and operational costs in the case of cycle hubs that are staffed and/or offer services. Revenue sources could include:

- User charging: pay-as-you-go or membership fees for use of cycle hubs or residential cycle hangars.
- Parking services or enforcement: use of profits from car park operations to support cycle parking, or allocation of revenue from parking or highways enforcement.
- Retail or catering unit: for commercial lease within a cycle hub, with profits used to support the running of the parking facilities. The increased risk to viability should be noted depending on the extent to which the cycle parking depends on revenue support from commercial units;
- Ancillary services: revenue support from profits on services such as cycle or scooter hire, or the sale of advertising space on the premises (subject to planning consent).

Joint procurement

For items such as Sheffield or M stands, local authorities may be able to achieve efficiency by collaborating on procurement. Joint purchasing may enable items to be bought in greater volumes than would be possible by an individual local authority.

Local authority officers should speak with their procurement department to find out if precedent arrangements with other authorities already exist and to seek authority-specific guidance on how to set up a joint procurement..

This will require a local authority to lead the procurement. The administrative burden may fall more on the lead authority but the costs of this could be shared across the authorities in the partnership.

Part 5: Accessibility and Inclusive Design

This section provides guidance which ensures cycle parking facilities maximise their potential usership by ensuring there are no conflicts in design, location, or planning considerations, which deter or prevent users gaining access.

Covers:

- Inclusive Design of Cycle Parking
- Additional Access Considerations

Inclusive Design of Cycle Parking

Introduction

Cycle parking in the Liverpool City Region should be accessible to all users and all types of cycles. The design and siting of cycle parking should be inclusive, and pay particular consideration to the needs of disabled people.

Design guidance

Wheels for Wellbeing, the charity working to enhance disabled people's lives through cycling, published the 4th edition of 'A Guide to Inclusive Cycling' in 2020, a comprehensive guide to inclusive cycling.

The guide sets out the principles of inclusive cycling parking. This section signposts the 14 technical recommendations from this guidance document.

Dimensions

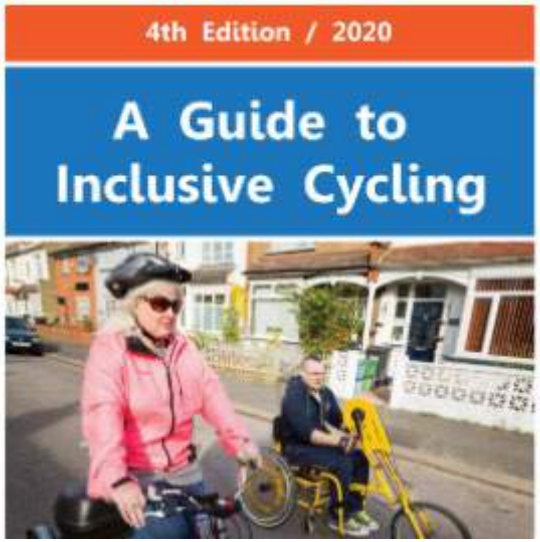
- The minimum gap between cycle stands/bays should be 1m
- At least one bay for non-standard cycles should be allocated at the end of a row of standard cycle parking stands, with these bays a minimum of 1.5m wide in order to allow for dismounting

Accessibility

- Parking facilities for non-standard cycles should either be located on ground level or have step-free access (e.g. via a shallow ramp or large accessible lift)
- Where possible, install cycle parking bays that people on non-standard cycles can ride into and out of (meaning no need for reversing, turning or lifting a cycle)

Designation and markings

- Signage should be put in place that clearly denotes cycle parking allocated for non-standard cycles (e.g. "Reserved for cargo and non-standard cycles or

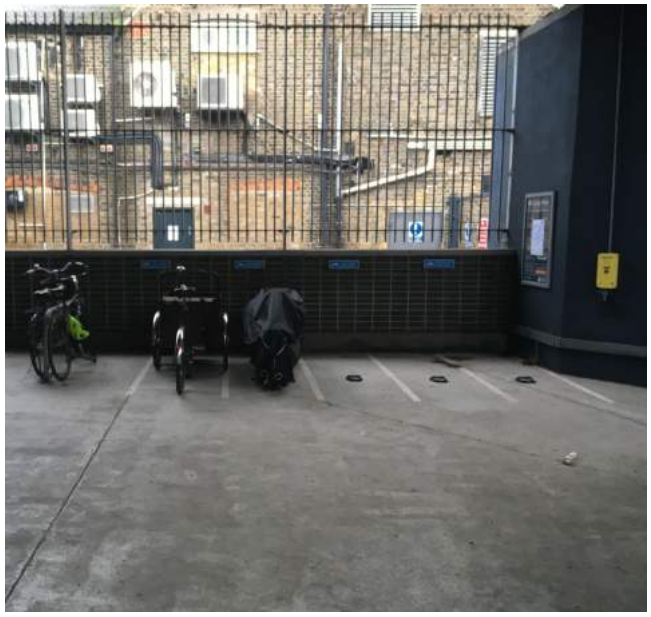


- (cont.) "Priority to Disabled cyclists"). Signs should be on a vertical pole.
- Blue and white paint should be used to delineate the area of a non-standard cycle bay (which could also feature a logo that depicts a disabled cyclist and cargo cycle)
- Blue and white paint might also be used on stands/poles to help with differentiation.
- All signage should be in large font size (at least 36pt), with the use of easy read language and symbols for instructions

Inclusive Design of Cycle Parking

Further considerations

- Lighting in cycle parking bays needs to be at least 100w in order for people with poor vision to be able to read signage
- At public facilities a help point (similar to those found on tube platforms) should be installed, which includes help for deaf people using British Sign Language (BSL), text and a face so that people can lip-read
- Non-standard cycle parking bays should be under shelter, not exposed to the elements and nearest to the entrance of any facility it is serving
- Thought should be given to the possibility of the co-location of disabled car and cycle parking bays, as well as family car and cycle parking bays
- Reserved cycle parking for disabled cyclists should be monitored and cycles that are wrongly parked should be removed. A disabled cyclists' Blue Badge scheme could help in identifying cycles and cyclists genuinely entitled to park there
- Where no inclusive cycle parking spaces have been provided, a notice should be appended that acknowledges this issue and signposts the user to alternative provision, where they can cycle into their destination and store their cycle indoors (e.g. a bookable cycle shed exclusively for use by disabled cyclists)



Examples of ground anchors and reserved spaces for non-standard cycles

Inclusive Design of Cycle Parking

Location and siting of cycle parking

Cycle parking should be fully accessible, visible, and as conveniently located as possible – sitting close to desire lines and destinations.

Cycle parking should be easy to find, with clear or intuitive information about how to gain access where this is controlled. Transition from cycling to parking should be smooth and accessible without stairs, lifts, or other barriers.

Eliminating conflict through design

Good design will ensure that conflict between other road and footway users is

Facilities accessed via pedestrianised areas may deter users and require further management to ensure cyclists dismount and conflicts with pedestrians are avoided.

Similarly ensure users are able to safely access the facility with minimal places for potential conflict with other road users. Sufficient space should be provided to allow access to parking without creating conflicts with traffic or pedestrians.

User distance tolerance

Consideration should also be given to the distances that people will travel to securely park their cycles. The London Cycling Design Standards recommends the following maximum walking distances between destinations and cycle parking:

- Short-stay (single destination): 15m
- Short-stay (multi-destination): 25m
- Longer-stay: 50m

Data captured at the following locations suggests a drop in usage and increases in informal/fly-parking above the following distances:

- London Bridge Station (cycle hub): users primarily worked 400m from facility.
- Joe's Bike Space (cycle hub): reported a maximum catchment of 200m.
- Utrecht Central Station (cycle hub): stakeholder reports 1-2 minute walking distance tolerance.

Inclusive Design of Cycle Parking

Additional design guidance

In addition to Wheels for Wellbeing's guidance, further design guidance can be found within the following:

LTN 1/20 (2020)

LTN 1/20, published in 2020 by the DfT, has a dedicated chapter on cycle parking which contains information on accessible design including recommended quantities of parking for adapted cycles for disabled people (Chapter 11, p.134). This design guidance incorporates a number of the recommendations outlined by Wheels for Wellbeing.

London Cycle Design Standards (2016)

Produced in 2016 by Transport for London, Chapter 8 of the London Cycle Design Standards is dedicated to cycle parking. Section 8.2.1 'Cycle parking for all' outlines specific guidance on designing for inclusive and accessible cycle parking.

While this document provides guidance intended for use within London, the content is equally applicable to the Liverpool City Region, and is widely regarded as a guide of best practice.

Standards for Public Cycle Parking (2021)

Developed by the Bicycle Association and Cycle Rail Working Group. This guidance document provides information on purchasing, installing and managing public cycle parking at stations.

The document is written with consideration for accessible and inclusive design throughout, and contains a dedicated section on Inclusive and Accessible Design in Chapter 3 "Design Principles".

Additional Considerations

Impact on equality

To ensure that cycle parking is not inadvertently discriminating against any protected characteristic groups, it is recommended that early engagement takes place with disabled rights groups such as the RNIB or other local organisations. This will allow for any concerns to be raised, and to maximise the likelihood of delivering a scheme that advances equality.

For larger schemes such as cycle hubs, an Equality Impact Assessment (EqIA) should be produced. This is a process designed to ensure that a policy, project or scheme does not unlawfully discriminate against any protected characteristic.

Access considerations

Traffic Regulation Orders (TROs)

TROs are Orders are designed to regulate, restrict or prohibit the use of a road (or any part of the width of a road) by vehicular traffic or pedestrians. They can apply at all times or during specified periods, and certain classes of traffic can be exempted from them.

For cycle parking to be fully accessible, it should be possible to cycle directly up to the cycle parking, and people should not be required to dismount. This can be particularly problematic for those with physical mobility issues who use cycles as a mobility aid.

Therefore, consideration should be given to any Traffic Regulation Orders or private land restrictions in the area that may prevent access to cycle parking. Solutions should be sought to exempt cycles, or alternative locations considered for the cycle parking.

Planning considerations for cycle hubs

Planning permission

The development of a cycle hub will have to be mindful of existing planning policy. A cycle hub requires a Change of Use application to be submitted, and as such has to comply with Local Plan policy. It is recommended that professional planning advice and a pre-application meeting should be considered early in the process of developing a cycle hub.

Restrictive covenants

For cycle hub conversions from vacant retail units, consideration should be given to restrictive covenants. A restrictive covenant is a clause in a deed or lease to property that limits what the owner of the land or lease can do with the property. Restrictive covenants allow surrounding property owners, who have similar covenants in their deeds, to enforce the terms of the covenants in a court of law. Early in the process of long-listing locations, it is recommended to check with landlords to determine whether their vacant units are restricted by a covenant.

Electric charging points

Provision for charging e-cycles should be considered when installing cycle parking. This can be especially important to people with non-standard cycles, which commonly have electric assist.

E-cycles can be charged using a standard 230V ‘G’ plug type, which is the plug that three rectangular pins in a triangular pattern.

Part 6: Management and Maintenance of Cycle Parking

When planning cycle parking it is important to understand what the ongoing requirements will be to ensure that facilities remain best practice. This section outlines the key considerations regarding keeping a well maintained facility, managing membership and the associated costs involved.

Covers:

- Maintaining High Quality Cycle Parking
- Managing Access to Cycle Parking
- Managing Cycle Hubs

Maintaining High Quality Cycle Parking

The Standards for Public Cycle Parking (2021) document, produced by the Bicycle Association and Cycle Rail Working Group, provides leading guidance on how to correctly maintain and service cycle parking. This section outlines the most relevant guidance to the Liverpool City Region.

Operation

The document sets out the three main operations arrangements for cycle parking areas and cycle hubs:

- Directly operated by a station operator or local authority
- Operated by (or in partnership with) external organisations on behalf of local authorities
- Operated by (or in partnership with) external organisations on behalf of station operators

Responsibility for operation and maintenance of facilities and equipment must be agreed from the outset.

Cleaning

A primary maintenance role is the removal of debris and abandoned cycles. A cycle may be classed as abandoned, if it meets one or more of the following criteria:

- It is secured in a way that it is blocking the public highway
- It is secured to a council owned property and considered unroadworthy (i.e. missing a wheel, seat, chain etc.)
- When it is reported by a member of the public and assessed as unroadworthy or in a dangerous position
- When it is noted as not having moved for a reasonable period of time – several weeks

Agreement should be found from the offset as to who will be responsible for this. For on-street cycle parking (such as Sheffield or M-stands), where possible, it is recommended that local authorities use their in-house street cleansing or parking teams to deliver these services.

Maintaining High Quality Cycle Parking

This can provide greater oversight, and reduce overheads. For residential cycle parking, it may be possible to appoint the supplier of the cycle hangars to provide ongoing maintenance. Certain suppliers such as Cyclehoop offer a maintenance service, allowing for outsourcing of all maintenance and service issues.

Problem reporting

There should be a clear way for the public to report abandoned cycles, or damaged cycle parking. Channels for this could involve a dedicated email inbox, or through a 'Report a Problem' webform on the council's website.

Servicing

Any cycle parking with moving parts, such as two-tier stands, or with doors, will also require periodic maintenance to ensure that they are in good working order. This may include lubricating or replacing bearings.

Cycle parking facilities that are well maintained and clean are more likely to be used than those left in disrepair.

Image credit: Cyclehoop

Managing Access to Cycle Parking

Introduction

The following section outlines the practical and administrative considerations when it comes to accessing cycle parking. This sections covers consideration for both short stay (on-street Sheffield and M-stands) and long stay (cycle hubs) cycle parking.

Practical considerations

Managing access

For residential cycle parking and cycle hubs, management of membership and administration of access control (keys, fobs, key-cards, or a mobile app) needs to be considered from the outset. The primary means of providing enhanced security comes via controlling access to the facility.

Access can be limited to a single user, a small pool of users, as in residential cycle hangars, limited to staff or users of a facility, or can be limited to anyone signing up for access as is the case with many rail station cycle hubs across Merseyside. Access can be controlled by staff, conventional key or key fob, swipe-card, mobile app/Bluetooth, or pin-pad.

Controlling access should be balanced with the ease and convenience of getting in and out of the facility. If gaining access is cumbersome, slow, or prone to faults, this can deter users. Due diligence should be carried out with suppliers to ensure access controls have been proven to be convenient and secure elsewhere.

A summary of the various access control methods and their pros and cons can be seen in Table 6.1 on the following page.

Security and surveillance

It is important that surveillance is provided as part of any secure cycle parking. As a minimum, this should include CCTV and passive surveillance through design.

Having staff on site offers the greatest level of security during their working hours, however is not likely to be a 24/7 solution, so should be complemented with additional measures.

Lighting

As outlined within The Standards for Public Cycle Parking (2021), the locally applicable existing standards for lighting and CCTV should be adopted, but the starting point should be:

- A good and consistent level of illumination should be provided at cycle parking area and along access routes
- CCTV (where required) and lighting should be considered together because the CCTV system will have specific lighting requirements;
- Local staff must know how to operate the CCTV system and it must be maintained

Increased lighting levels in dark areas can reduce public fear of crime and reduce the opportunity for an offender to commit a crime.

Further detailed information on security, surveillance and lighting can be found within Chapter 4: Location and Situation in ‘The Standards for Public Cycle Parking’ (2021).

Managing Access to Cycle Parking

Table 6.1: Access control methods to cycle parking

Access Control (examples of use)	Pros	Cons
Key/fob (e.g. Residential Cycle Hangars)	• Control over total access numbers – including ability to discontinue access • Simple, user friendly, low maintenance	• Conventional keys can be copied • Admin costs distributing and managing cards
Swipe Card (commonly used by rail services, e.g. Southern Rail Cycle Hubs)	• Can be combined with other purposes e.g. travel card • Control over total access numbers – including ability to discontinue access	• Admin costs distributing and managing cards
Pin-pad (commonly used in secure shelters – education, workplace, residential)	• No management of physical keys • Access is easily granted	• Pin can be easily shared – leading to low levels of control
Mobile Phone (e.g. 'Falco Smart' cycle hangars)	• Opportunity for data collection through app + channel of communication • Can be combined with ID verification allowing operators to know who has accessed the facility in a time window • Users can be quickly and remotely granted access (QR code could even be used to link to download app)	• Possibly exclusionary due to comfort with technology or cost • Liable to failure – e.g. dead battery, no signal, lack of data • Admin/technical support for app
Staff (e.g. The Hub Stockton, Cycle Hubs Cleethorpes and Grimsby)	• Highest level of security • Assistance and assurance for users • Problems easily reported	• Most expensive • Requires building of facilities to standard fit for staff

Managing Access to Cycle Parking

Administrative considerations

Once the practicalities of accessing secure cycle parking have been agreed, consideration must be given to how people access the service.

Resident requests for residential cycle parking – identifying demand

It is recommended that requests for cycle parking are managed through an online request form on the local authority website. The request form should present a series of questions to interested residents in order to collect data and gauge demand. The data collected would allow providers to focus their resources on specific streets or housing estates where demand is highest.

This is the most commonly used method of identifying demand for residential cycle parking, and it is being successfully used by local authorities such as the London Boroughs of Hackney, Islington, Wandsworth and Greenwich. Other local authorities such as the London Borough of Lambeth use dedicated email accounts that can be contacted to request cycle parking.

Standardising applications through an online request form however has the additional benefit of collecting data further analysis in a clean and raw format. This would allow providers to undertake detailed analysis of demand within their boundaries, for example understanding what housing tenures are most commonly requesting cycle parking, where high demand postcodes or located, or popular demographic types.

Managing the waiting list

Once a waiting list has been developed, a decision is required to decide how cycle parking spaces are allocated, and on which streets that cycle parking is going to be located. The method of this allocation process will depend on the aims and desires each local authority.

Methods of prioritisation vary between local authorities, and that there is no universal method of implementation. Methods of prioritisation could include:

- First-come-first-serve: where residents are allocated spaces depending on whether they were one of the first to request a space
- Accommodation type: prioritising accommodation types such as shared accommodation or rented flats over those who live in privately owned larger spaces who are more likely to have space to store their cycles indoors
- Prioritising those with stepped access to their property: ensuring that anyone who has to carry their cycle up a flight of stairs is prioritised over those who don't have to
- Areas with lower car parking demand: prioritising areas with lower car parking demand may make it easier to identify space on-street to install a cycle hangar

Agreeing on the exact location on specific streets for the cycle parking will depend on a range of factors, including localised demand for cycle parking and any on-street restrictions such as car parking stress. Collection of postcode data from applicants allows for mapping to better understand where hangars would most benefit residents, and where walking distances between housing and cycling parking can be limited.


GREAT
WESTERN
RAILWAY
GREAT WESTERN

Managing Cycle Hubs

Operating models

The appropriate type of operating model is dependent on many factors, including the preferred type of cycle hub and the availability of funding/potential income streams.

For most operators, capital costs are met by grant funding, while operating costs tend to be minimised to keep the facility financially sustainable. Where grant funding is not available or limited, prospective operators have sought to implement lower cost or lower risk models:

Repurposing unused units within the owner's portfolio: This model sees empty spaces leased to operators at peppercorn rents in exchange for them running and maintaining the cycle hub.

Any returns made by the operator contribute to upkeep, staff costs, and any other overheads

Collaborating with local interest groups to start small, low-cost community cycling projects: Within this model, existing council schemes generate revenue for the operator, e.g. provision of recycled bikes from the local authority's cycle recycling scheme for resale at no cost to the operator, paid use of community spaces, promotion of services, complementary infrastructure improvements and direct officer support.

Charging turnover rent above an agreed threshold: This model could be appropriate for some hub operational models, most likely those facilities with potential for generating additional income through a shop or café.

In this instance, a low base rent is charged to the operator, should the annual turnover exceed an agreed threshold the rent is increased proportionately. This agreement provides benefits to both operator and owner through decreased risk to the operator, particularly whilst the business is being established. For the owner, potential additional revenue and potentially higher usage rates can be achieved.

Note that if the cycle hub is replacing an existing car parking area, it might need to be included in the business case as loss of revenue from parking levies.

Decision of removing parking can sometimes also be controversial among residents/business owners/users, so careful consideration should be given, and surveys undertaken to establish a case for reallocation.

Working with third-party operators: In certain situations, it may be possible seek to partner with or outsource operations to a third party. Table 6.2 (on the following page) considers the advantages and disadvantages of outsourcing the operation of a cycle hub.

The involvement of third-party organisations in operating a cycle hub could be achieved through a tendering process or through a partnership approach.

Managing Cycle Hubs

Table 6.2: Pros and cons of outsourcing vs in-house management

Operating model	Advantages	Disadvantages
Fully outsourced	• Limited ongoing resource requirement from the Council • Established facilities/mechanisms (e.g. access control) that have worked elsewhere • Potential to pass risk to commercial operator	• May not be flexible/able to offer bespoke solutions • May be more expensive • Contracting and tendering process may be onerous • Risk of no bidders/poor quality bids
In-house - operated by the council	• Able to align with other Council initiatives/cross promotion • Gives greater control over the offer provided and ability to be flexible e.g. adjust charging or the access control mechanism, introduce/withdraw/amend services, • Gives potential for a direct communication with users, to promote other initiatives, build a cycling community	• Lack of expertise and experience running this type of service • Potential lack of staff resource • Risks owned by the council

Ongoing monitoring and evaluation

Being able to accurately assess whether a facility is being well used, when it's busiest and by whom it's being used allows operators to develop strategies to boost usage, if required.

Approaches to capturing monitoring data include:

- Counting entries / exits via key fobs or smartcards
- Spot counts of parked bikes at regular intervals (e.g. once per month / week)
- Sensors in bike stands to automatically record if a stand is occupied and for how long
- Surveys with users can provide richer data, such as evidence of behaviour change or opinions on the facility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