

Guidance for Community Bike Share Schemes



SECTION 06

Bikes and how to share them



06: Bikes and how to share them

This section details all the things you need to think about when it comes to choosing the equipment you want and then how to share your bikes, so they are available to users.



The bikes

There are of course many options regarding bikes, and within each kind (e-bike, adaptive, cargo or pedal) there are lots of different varieties.

This section provides an overview of some of the things to think about to help you make your choice. We have also included links and contact details of sources of more in-depth technical information.

View our [bike share comparison table](#).

Which bike is for you?

Above we have provided a link to a list of suppliers and third parties who can give you advice on which bikes are suitable for your project. To help with these decisions, we have provided some points for you to consider.

Once you know the answer to these, the bike provider can then help you think through which bike type may be most appropriate:

- What kind of journeys will be made? (short / long / uphill)
- What is the local topography / terrain? (coastal / cobbles / tracks)
- Do you have battery swap capacity?
- Will you be providing training for riders?
- Are you wanting to appeal to older audiences?
- Will your fleet be used to transporting goods?
- Do you want to make the scheme accessible to people with certain disabilities?
- What maintenance support will you have?
- For users that will require a specific bike, what needs do they have?
- How frequently will the bikes be used?
- Are the bikes being used as 'try before you buy'?
- What is your budget?

TOP TIPS:

- Whichever you go for, it is very useful to build a relationship with your local bike shop, as they can help you with maintenance, training and provide ongoing support
- Advice from a community group: "My main advice would be to make sure you get bikes that suit your target usage. E.g. if bikes are going to be in cold conditions some times, e.g. cold conditions such as under zero temperatures, then you need bikes that can tolerate this. Bike loans can get around this problem if someone has loaned one for the winter and using them more."
- Think about light versus heavy duty use and how this could affect bike choice
- The [Active Travel Suppliers Directory 2020](#) covers a thorough list of active travel services and products that could be useful for groups
- Check out the [Halfords guide](#) for information on charging e-bike batteries



The storage

The type of storage you will need for your scheme will depend on the approach you are taking to running it and how you would like people to access the bikes.

[Cycling Scotland](#) and [Spokes](#) have produced thorough guidance on cycle parking.

This section applies storage to a sharing scenario, helping you think through how different approaches can impact how you share your bikes. We have not provided an exhaustive list of the different options, but examples of ones you could consider.

For example, if you are a community group operating from a community centre where people come and pick up the bikes at set hours, you could simply store them in the building.

But if you want to provide access for any time of the day, without someone having to do the actual handover of the bike, a more contained and secure storage solution might be required.

Types of storage

| Type | Access options | How to enable self service (at certain hours or if the bikes are to be available 7 days a week 24 hours) | Approximate costs for one unit |
|--|--|---|---|
| Cycle lockers | Users would access the bikes by unlocking: <ul style="list-style-type: none">• Smart locks depending on some types of bike lockers• Padlocks• Keypad lock• Combination lock | Users would need to know codes or have the key depending on lock choice | £2,000-3,000 |
| Shipping container | Padlocks | As above but could be cumbersome for users to open | £8,000 – prices vary depending on size and whether new or second hand |
| Sheds / garages | As above | As above | Wide price range – see Cycling Scotland guidance |
| Bike lockers E.g. Brompton for folding bikes and Bikeaway | Specific requirements depending on models | Brompton Bike Hire would provide a whole service for you - not just the lockers Contact scotland@como.org.uk for more information on these types of solutions | £600 For standalone lockers such as Bikeaway |
| Informal (e.g. in a community centre / in a building) | Someone would need to oversee entry into the building | For self-service, a user would need the key to the building | |

Types of storage

| Type | Access options | How to enable self service (at certain hours or if the bikes are to be available 7 days a week 24 hours) | Approximate costs for one unit |
|---|---|--|--|
| Smart locks (sometimes no storage required)* | Smart lock on each bike and users would unlock it via a smart phone | Users would need the smart lock app We have included smart locks in storage as it may be you use those within a certain location (although storage to protect the bikes is advised) | £100 - depending on make |
| Hosted elsewhere e.g. a local bike shop | Would depend on the local bike shop | Would depend on the local bike shop | You could agree an annual fee with the shop |
| Docks | You would get an operator to put docks in a specific area | This is the integrated option and you would bring in an operator to partner on running the scheme - unlikely for a small scheme but potentially useful for 50 bikes or more | Contact scotland@como.org.uk for associated costs and more info on these options |

*A smart lock is one which requires a smart phone to unlock it, via a downloadable app. There are many different brands and costs.

The potential limitation is that only users with smart phones could access this type of lock.

The benefits include extra security as you have to have a unique code to unlock them (through the app) and that they can be stored more flexibly.

To further help decide what type of storage suits your scheme, the below table includes some considerations.

Bike storage considerations

| Type | Things to consider |
|-------------------------------|---|
| Access | <ul style="list-style-type: none"> - Multiple locations may require redistribution, unless it is just 2 sites which naturally balance - 24 hour access - 9-5 weekdays - Just weekends - Specific times - If you are providing long term loans, you may wish to check that the person borrowing it has suitable storage themselves |
| Where to place storage | <p>Consider the immediate environment – such as how well it is overlooked, whether it has reasonable footfall, good lighting or CCTV (and ensuring there is access to the footage)</p> <p>Make sure the location is convenient for the user and for those needing to check battery levels on e-bikes</p> |

Bike storage considerations

| Type | Things to consider |
|-----------------|--|
| Size | <p>A small fleet may require small sized storage</p> <p>Storage varies in capacity, security rating, quality and ease of use, e.g. a locker where you have to take out an e-bike to get to the one behind it is less user-friendly; having plenty of space for accessories, cleaning kit and so on, is a real help</p> <p>Cargo bikes and adaptive bikes may require more space</p> |
| Promotion | <p>Storage could help promote the scheme by being placed in an obvious location and using the surface to add marketing posters. but if this is the case, you may wish to ensure they are extra secure</p> |
| Budget | <p>Cycling Scotland can provide funding for storage - it is a question of working out what you need and therefore what the expense will be</p> |
| Security | <p>CCTV could be necessary</p> <p>Advice from Police Scotland:</p> <ul style="list-style-type: none">- Consider fitting ground anchors to secure all bikes and valuable items- Use a hardened steel chain (endorsed as 'Sold Secure' or 'Secured by Design') and closed shackle padlock- All bikes and valuables should be security marked- All padlocks should be endorsed as 'Sold Secure' or 'Secured by Design' standard |
| Storing e-bikes | <p>Consider where users or the bike share project will charge the e-bike batteries - options for this include providing power in the locker</p> <p>On some models of e-bike the battery doesn't have to be removed from the ebike for charging, which may suit your situation, otherwise, the battery has to be unlocked, removed and charged in a suitable place</p> <p>Moray Carshare was informed due to the northerly location of the project, that the batteries shouldn't be stored in cold temperatures - as a result, thermal blankets were recommended</p> |

TOP TIPS:

- Check lead times for orders and take them into account when planning delivery
- Delivery charges might add substantially to costs, and some suppliers may not deliver to certain locations

Booking the bikes

If you want to share your bikes, then there needs to be a mechanism for users booking them out. This ranges from very simple methods to more high-tech options, depending on your budget / users / capacity. For each approach, make sure you think about how easy it will be for someone to book the bike out, and where you will promote the option.

Simple method:

- Users book via email / phone / in person or Google Calendar for example

Software packages / sharing solutions:

You could pay for an online package that can handle the bookings for you. There are many available on the market, below are a few examples:

- **SuperSaas**
- **Bike Rental Manager**

Some software solutions may include other functions such as handling payments and processing billing, or enabling you to record maintenance checks etc. For example, Bike Rental Manager covers inventory, reservations, payments, maintenance, waivers, deliveries, tracking and reporting.

High-tech options (booking / billing / unlocking and locking of bikes):

There are more high-tech approaches to running your scheme where the provider will take care of both booking, billing and other functions via their operations (at a higher set up and running cost).

Again there are a number systems available on the market, but here are two examples:

- **App Bike**
App Bike combines smart phone and smart lock technology to provide a bike sharing and rental solution. Please note App Bike will only operate a scheme with a minimum of 6 bikes.
- **Zemtu**
Zemtu software support the **I LOCK IT** bicycle locks. With the smart phone app you can unlock and lock the bike locks via Bluetooth just as you unlock and lock cars. These locks have GPS functionality and will also provide the geographic location in case of a theft. They can be easily mounted on any bicycle and are very robust.

Please email scotland@como.org.uk for more examples.

TOP TIPS:

- It is useful to think what you need before you choose an option – as well as considering whether it will make your life easier and what the costs are
- Users may not always book the bikes out correctly - this may be a simple case of sending a reminder to one individual or a blanket reminder to all users, while having a physical reminder, such as a poster where the bikes are stored asking 'Have you booked this bike?', can be helpful
- Some solutions may only be applicable to e-bikes
- Most of the above options include cargo and adaptive bikes, but for more options of specific solutions for those – get in touch via scotland@como.org.uk

Sharing the bikes

It is useful to think about how the different physical components of your scheme work together, when sharing your bikes (storage, access and booking etc). There are some organisations you can pay to take care of everything, and others that do a bit and you can take care of the rest. Alternatively, you can do it all yourself (which is what most community schemes do). Email scotland@como.org.uk for more information on the different options.

For sharing cargo bikes you can find out more from one of our pilot projects: [Outspoken Delivery, Cambridge & Norwich](#) (now known as [Zedify](#)).

For information on sharing adaptive bikes check out: [Adaptive Bike Share: Expanding Bike Share to People with Disabilities and Older Adults](#).

Below is a table detailing how some of these components work together in current schemes.

Approaches to sharing bikes

| Scheme | Type of sharing scheme | Storage | How bikes are booked | How they access/unlock the bikes | Challenges / things to consider | How do participants sign their user agreements / any relevant documentation prior to borrowing a bike |
|---|---|---|--|---|---|---|
| St Andrews University Go E-bike While this scheme is more relevant to the Sustrans Workplace Bike Pool Guide , it provides an example of how a community can run a scheme using an app / hi-tech solution | Bikes owned by the university Software package provides the sharing solution (this doesn't cover maintenance and redistribution) | Bike shelter (Broxap Cycle Drum) | Users have to download the app: App Bike | Staff attend a 1 hour induction, they are then given access to the App Bike system and code for the bike lockers Smart locks on the bike are unlocked using App Bike app | Users need a smart phone to access No one needs to be there when bikes are used / booked out Weekly or biweekly battery swaps and bike checks | Staff only, via the app sign up |
| Forth Bike | Integrated - which means an operator helps run the scheme and takes care of the booking, billing, docking stations and access to bikes | On-street | People can register either in advance via the website or through the app | A fob is sent to the member once they have joined (free of charge, upon request) Or they can download the app when at the bikes and access via that | This option requires more funding and operational capacity - see their website for updates on their current guidance | Website or app |

| Scheme | Type of sharing scheme | Storage | How bikes are booked | How they access/unlock the bikes | Challenges / things to consider | How do participants sign their user agreements / any relevant documentation prior to borrowing a bike |
|---|---|------------------|--|---|---|---|
| Huntly Development Trust | Physical handover of the bikes, no tech required | Hub building | No online system - bookings are made via Facebook, email, face to face or by phone | They are handed over the bike by the project coordinator | Staff member needs to give the bike to a participant which may be outside of normal working hours | Paper documents either emailed out and returned, or picked up in person at the hub |
| Cambridge Cohousing 1 x e-cargo bike | Cambridge Cohousing has an electric cargo trike with an extra battery | Former bin store | Via Slack and Google Calendar | A combination padlock and within the storage a ground anchor with a similar padlock | Not many challenges as informally arranged among one group of residents | In person |

Contact: scotland@como.org.uk

Next steps:

This section has hopefully given you some ideas for what type of bikes and storage may suit your scheme, as well as how to then go about sharing them. Now you are in good stead to read our next section on how to take care of all these assets and the people using them!



Further help and support from CoMoUK

CoMoUK is the national charity for the public benefit of shared mobility. Founded in 1999, CoMoUK enters its third decade with a depth of expertise and research into shared transport and the built environment.

CoMoUK can provide bespoke information and support on how to set up and develop your community bike share scheme. This includes:

- Helping you to think about business cases and project plans
- Providing examples of best practice and case studies
- Sign posting you to other parties and relevant organisations
- Providing advice on potential sharing solutions for your scheme (such as booking and billing)

To find out more about how we can help you, please contact scotland@como.org.uk for details.

Please also see our website como.org.uk for further information and to sign up to our newsletter and forums.

Find out more about CoMoUK and collaborative mobility online at como.org.uk

Scotland office:
Thorn House, 5 Rose Street, Edinburgh,
EH2 2PR

CoMoUK is a registered charity in England and Wales (no. 1093980) and Scotland (no. SC044682)