

Recommended specifications for cycle fleets and bike libraries

About

These notes have been prepared for grant applicants seeking funding to develop or expand a bike fleet or provide access to bikes. The guidance relates to procurement of two-wheel, adult pedal cycles. If you are seeking funding for other types of cycles, such as cargo bikes, ebikes or adaptive cycles please contact info@cyclingscot

Guidance:

When choosing bikes to support your community to cycle, six key factors to consider are:

- Price
- Size
- Type of riding
- Weight and simplicity
- Ease of maintenance
- Storage

Price:

Even with a good servicing regime, cycle fleet bikes will have a tough life! Therefore, look to buy a quality, robust bike to start with. Some mechanical parts, like chains and gears will wear out regardless of the price, but look for a quality frame, wheels, and controls. We recommend any fleet bike should have a manufacturer's recommended retail price (RRP) of at least £350 (as of Autumn 2022).

At the same time, given the range of quality and robust bikes now available on the market, Cycling Scotland will not contribute more than £650 per adult cycle or £350 per child cycle unless for a specific purpose such as a cargo bike, adaptive cycle or ebike. You should also consider quality, refurbished bikes where available locally.

Size:

Riding a well-fitted bike inspires confidence, and control. Most bikes have adjustment of saddle and handlebar height, plus brake lever reach. However, you may need to consider other issues such as frame design or a shorter crank length for smaller riders. For children, see our Bikeability Scotland specification sheet.

Many bikes come with 700c / 29" wheels as standard. Shorter riders may benefit from smaller wheels. Manufacturers will have specific guidance relating to their sizing. Your local bike shop will be able to provide advice.

You will probably need to buy more than one size of bike. Where possible, buy from the same range to allow for easy swap of parts and equipment.

Type of riding:

Consider where your bikes will be used. Cycling Scotland promotes everyday and leisure riding, and we will not fund bikes for sport or technical purposes like all-mountain bikes, road bikes or track bikes.

Hybrid bikes generally offer the best balance of comfort and efficiency.

If your bikes will predominantly be used on roads, consider bikes that can accommodate tyres up to 35mm wide (with a mudguard). This will provide sufficient comfort for bumps in the road, whilst also reducing rolling resistance

If your bikes will be used on a mix of road and traffic-free tracks and trails, you might want something with wider tyres (35-60mm) and more grip.

For most new riders, a flat handlebar is the easiest and most comfortable.

Weight and simplicity:

The lighter the bike, the more efficient on undulating terrain. However, weight needs to be balanced with comfort and robustness. For instance, mudguards add weight, but for all-year riding they make the journey more comfortable.

With standard diamond-shaped frames, it is possible to get a robust, comfortable and affordable bike weighing little more than 10kg with a quality aluminium or steel frame.

Accessories like panniers for carrying shopping can be added to this.

Avoid unnecessary features like suspension. Unless you are riding on technical off-road trails, or spending a lot of money on these features, suspension simply adds extra weight. A less firm tyre can provide the same level of comfort.

With gears, simplicity is easier for new cyclists. Look for 7-11 gears, ideally with just one gear lever. This is generally lighter, easier to maintain, and simpler for users.

E-bikes:

The Energy Saving Trust (EST) has [detailed guidance](#) on the types and benefits of ebikes, and administers grant funding and loans to help individuals and organisations to buy them.

Where an applicant can demonstrate need and fit with relevant criteria, Cycling Scotland will consider funding e-bikes (providing need cannot be met through EST)

In addition to wider guidance, when procuring your fleet of e-bikes, look for bikes with:

- The motor housed beside the pedals (rather than in the front or back wheel)
- A battery that can be removed easily.

Ease of maintenance:

Before we fund a cycle fleet, we will ask how the bikes will be maintained, by who, and how maintenance activities will be funded.

Bike fleets require regular inspections, servicing, and maintenance. For this reason, it is useful to keep things simple.

Many bikes now come with hydraulic disk brakes – these require less frequent adjustment but are trickier to fix when something goes wrong. Cantilever v-brakes require more frequent adjustment but are easier to fix. Avoid mechanical disc brakes for your cycle fleet.

If you have a fleet of bikes you will want to be able to remove wheels regularly to fix punctures or for cleaning. Make sure you have quick release on the wheel skewers or bolt-thru hubs. For this reason, it is best to avoid hub gears or coaster brakes as they make wheel removal much trickier.

Storage:

Before we fund a cycle fleet, we ask where bikes will be stored. If bikes are out for loan it is the responsibility of the user to safely store them. However, when bikes come in for servicing or maintenance they will need to be stored in a dry and secure area.

For this reason, folding bikes might be attractive as they take up less space. Folding bikes can also be versatile as they adjust to fit a range of riders. However, they also have disadvantages including increased weight, cost and difficulty of maintenance.

See our cycle storage information sheet at [cycling.scot](https://www.cycling.scot)

