

The image features two women using micromobility vehicles in an urban environment. On the left, a woman in a brown suit and helmet is riding an orange e-bike with a front basket, looking at her smartphone. On the right, a woman in a white top and long skirt is riding a purple e-scooter. The background shows a walkway with large stone columns and steps. The image is overlaid with semi-transparent colored shapes: a yellow shape at the top, a pink shape on the left, and a blue shape on the right.

The mobility landscape is changing. How, why and when we travel has altered significantly and new micromobility modes provide alternative travel options. Our developments must therefore cater for these changes as e-bike and e-scooter ownership increases. Getting infrastructure for micromobility vehicles right is crucial.

Designing for
micromobility

Parking in offices



Designing for Micromobility

This note sets out guidance surrounding micromobility parking within offices. Guidance includes e-bike and e-scooter quantity, location, stand types and further considerations.

We recommend that forward-thinking developers, architects, planners and engineers use this note as a reference when considering facilities for privately-owned micromobility modes.

01. How should we design for micromobility in the workplace?

Key principles
Parking quantity
Location & stand types

02. The evolving future of micromobility

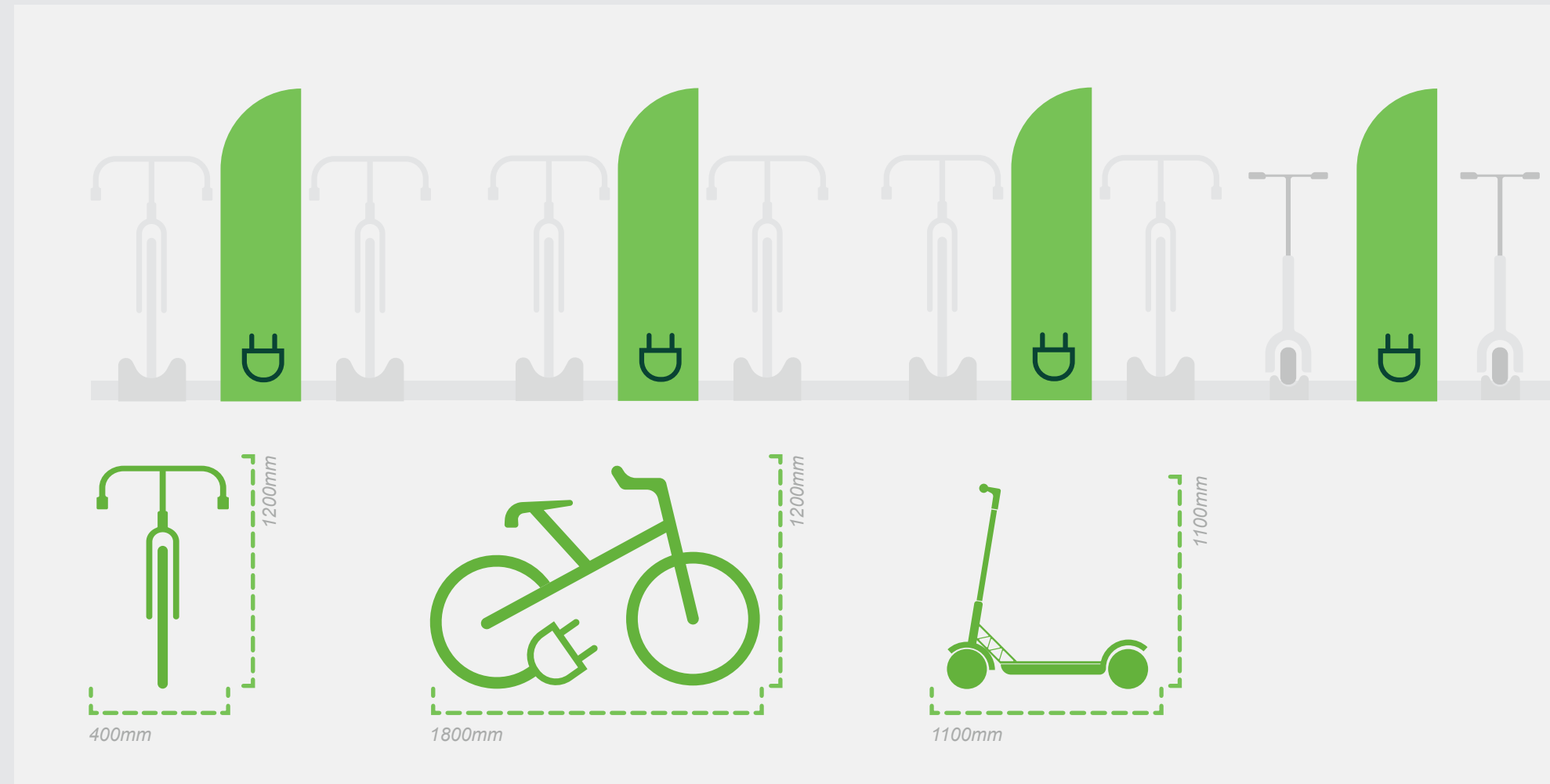
How we travel is changing

01. How should we design for micromobility in the workplace?

Key Principles

It is expected that micromobility modes such as e-scooters and e-bikes will gain popularity, particularly as a way to commute. Riders will therefore be required to store and charge their vehicles in their places of work.

At present, only standard cycle parking is provided in most developments. If buildings fail to provide specific space and infrastructure for these new modes, users will be discouraged to use them, perhaps returning to private cars.



Crucially, all parking should be:

04. Supplied in sufficient quantity

08. High quality

01. Secure

05. Clear of all obstacles

09. Complemented by lockers, showers and changing spaces

02. Convenient

06. Easily accessed for users of the development

10. Provided with electrical charging points

03. Weatherproof

07. Diverse to accommodate different vehicle types and sizes

How should we design for micromobility in the workplace?

Quantity

As the popularity of cycling has increased, policy requirements for cycle parking spaces in developments have also increased.

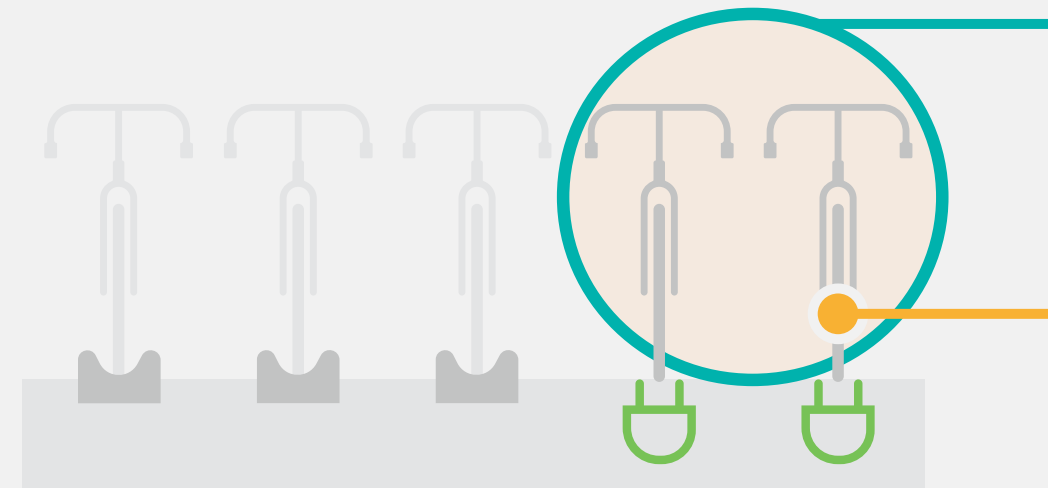
Current mobility trends have surpassed policy, with few policy documents requiring e-bike parking, or alternative parking facilities for other micromobility modes. The provision of these facilities will continue to encourage active travel and modal shift away from the private car.

The following figures are provided as a guide to those wishing to provide adequate facilities for the users of their development.



E-bikes are rapidly gaining in popularity and so the provision of stands (tubular/Sheffield) compatible with them and the correspondent charging facilities.

'Passive' charging spaces (spaces wired up but not necessarily active) should also be considered to allow additional charging points to be installed at a later date in accordance to demand.



20% charging facilities

20% of total cycle parking provision should be provided charging facilities.

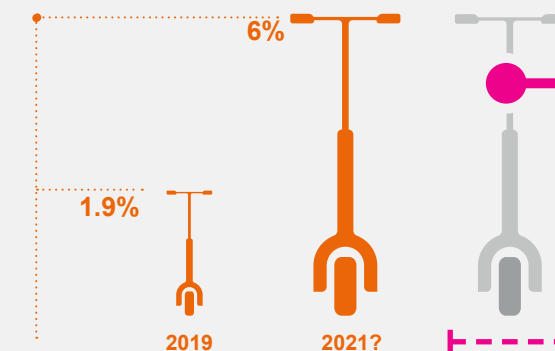
10% passive spaces

An additional 10% of space should be 'passive.'



The uptake of shared e-scooter systems, both internationally and within the UK e-scooter trials is well documented. CEBR estimates that up to 70,000 daily one-way e-scooter journeys could be made in London if trials are rolled out across Inner London.

The use of private e-scooters is, therefore likely to be high. A recent study conducted by 6t¹, approximated that by the end of 2019, shared dockless e-scooters had reached a modal share between 0.8 and 1.9 % in Paris. This figure is expected to have increased significantly in 2020 during the pandemic and the increased regulation of operators in the City of Paris and perhaps modal share will increase further in 2021. In UK cities, if private e-scooters are legalised, their mode share could be expected to range from 2% to 6%.



1 space/150 sqm. NIA floorspace

All e-scooter spaces should be provided with charging facilities.

1. 6t, (2019), Usages et usagers de services de trottinettes électriques en free-floating en France, 158 p. URL: <https://6-t.co/trottinettes-freefloating/> (consulté le 13/09/2019)

How should we design for micromobility in the workplace?

Location & stand types

The location and type of stands provided for parking are key to their usability. The main principles of appropriate parking facilities are set out below.



1 Well-lit

All areas of parking should be well-lit, so users feel safe while parking and using charging facilities.

2 Spacing

E-bike stands should be well spaced. E-bikes are heavy and more challenging to manoeuvre in comparison to their non-powered counterpart.

3 Charging points

Charging points should be provided near appropriate stands to allow users to secure their e-bike/e-scooter whilst it charges. Stands with built-in charging points should be considered.

4 Signposted

Signage, paintwork and other wayfinding strategies should be used to identify adequate parking infrastructure and charging facilities

Additional storage areas

Given their size, e-scooters are more easily stored than e-bikes. Some developments could consider e-scooter parking on each floor in smaller storerooms. This will discourage employees from charging their scooters next to their desks which might be a problem in open-plan, hot-desking environments.

Alternative stands

Dependent on security, some parking areas might not require physical stands. E-bikes and e-scooters sometimes have kickstands allowing them to stand on their own. These can be parked in designated bays with a nearby floor or wall hooks where locks can be attached to.

Inside

Internal parking areas at workplaces provide an excellent location for charging equipment which will allow building users to park and charge their micromobility devices safely.

Mis-use discouraged

Signage should prevent standard cycles from using stands with electric charging provision. Stores should be regularly checked with any misuse reported. Charging station etiquette and instructions should be clearly highlighted.

Two-tier stands:

E-bikes are heavy and difficult to lift. E-bike stands should be at ground level only.

Step-free

E-bikes and e-scooters can be very heavy. Lifts should be provided to basement parking areas and any ramps provided at a gentle gradient.

The above illustration shows a possible environment for indoor parking suitable for the e-scooters and e-bikes.

02. The evolving future of micromobility



How we travel is changing

E-bikes and e-scooters have steadily gained popularity in the UK; the disruptive COVID-19 pandemic has acted as a trend accelerator as travellers now seek to travel independently, away from public transport.

Whilst shared e-scooter trials were brought forward...

 e bike | **47%**  2019 - 2020

... interest in e-bikes have soared with Google data suggesting that searches have increased by 47% from 2019 to 2020

 e bike | **172%**  2016 - 2020

An overall increase of 172% increase since 2016



Artist impression by Momentum.

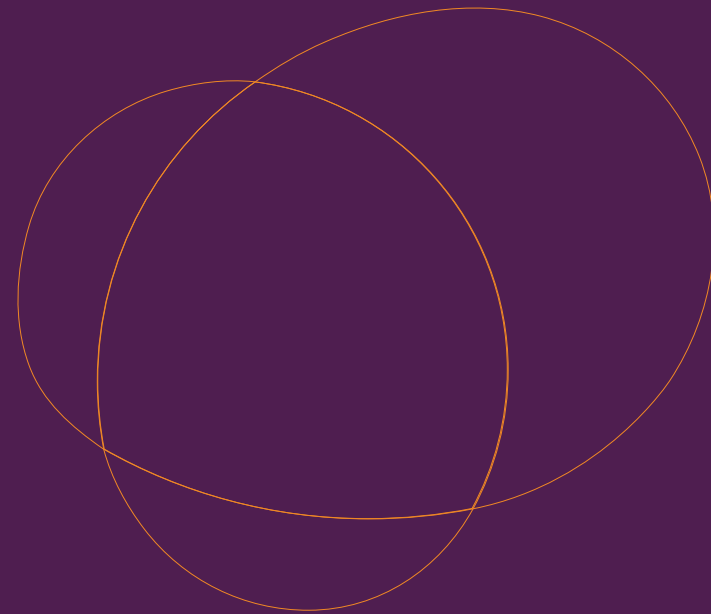
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“I truly believe our streets should comfortably and enjoyably connect every individual to their destination and this will be helped through the introduction of micromobility initiatives in the cities we live, work and play in.

”

Grace Packard. Principal Consultant





Momentum Transport Consultancy