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# Regulating electric scooters (E-scooters)



## Summary

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## Summary

Micromobility devices – such as electric scooters (e-scooters) – could help to solve the urban transport challenge of poor air quality stemming from increased congestion. However, they are currently banned from UK roads and pavements. Since 4 July, local areas have been able to run e-scooter rental trials, for use on roads, cycle lanes and tracks only, for up to 12 months. The trial end date has been extended to Spring 2022.

### Legal status of e-scooters

While it is legal to buy or sell an e-scooter (classed as a battery-powered personal transport device), riding them on public roads, pavements or cycle lanes is against the law. Riders could face a £300 fine and six points on their licence if they use them on public roads or pavements. Riding e-scooters on private land is legal with the landowner's permission.

[The Electric Scooter Trials and Traffic Signs \(Coronavirus\) Regulations and General Directions 2020](#) (SI 2020/663) provide the legislative basis for the e-scooter trials. They define 'e-scooters' and amend road traffic regulations to exempt e-scooters being used in a trial from certain requirements of the Road Traffic Act 1988. Even in local authority areas which decide to run trials, it will still be illegal to ride a privately owned (non-trial) e-scooter on public roads, pavements or cycle lanes.

### E-scooters: Transport policy panacea or street menace?

Views differ on the potential benefits and problems presented by e-scooters. Some believe that they offer solutions to a wide range of transport policy goals (such as reducing pollution, congestion), while others believe that they are potentially dangerous and may undermine messaging about active travel and green transport.

Three of the key issues are:

- **Journey replacement for cars, public transport and other modes:** E-scooters could help cut congestion and improve air quality in urban areas. In cities that allow e-scooters, it is not clear whether e-scooter trips have replaced car journeys. Rather, some are concerned they have replaced trips that would otherwise be walked, cycled, taken by kick scooters or by public transport. This would negate both the supposed congestion-alleviating benefits and could have negative health impacts, through reduced physical activity.

- **Tackling climate change:** Proponents of e-scooters suggest they can help cut everyday carbon emissions by getting people out of their cars. However, several studies suggest the short lifespan of e-scooters means these carbon savings may be minimal, if achieved at all.
- **Safety concerns:** Stakeholders have expressed concerns over: whether micromobility devices are physically robust and safe by design; whether users have the skills to use them safely; how they interact with other vehicles, road users and pedestrians; and how liability is handled when accidents occur.

## E-scooter rental trials, 2020-

From 4 July 2020, local areas in England, Scotland and Wales have been able to undertake 12-month e-scooter rental trials, provided they meet DfT's requirements. The trial end date has been extended until March 2022. During the trials:

- Rental e-scooters will be allowed on roads and cycle lanes, but will continue to be banned from pavements;
- E-scooters will be limited to a maximum speed of 15.5 mph;
- Riders should wear helmets, but they will not be mandatory;
- Privately-owned e-scooters will remain illegal; and
- Riders will need a full or provisional car, motorcycle or moped licence to use the devices, and they must be aged 16 or over.

The trials will be used to inform future government policy and possible legislative change. Trials have been launched in 32 trial areas across a mixture of towns, cities, local authorities and combined mayoral authority areas.

The Transport Committee welcomed the Government's e-scooter trials ahead of work to examine the legal status of e-scooters, which they said should draw on lessons from other countries so as to avoid potential negative impacts on pedestrians and disabled people.

# 1 Future urban transport

Congested streets are an increasingly common sight in UK towns and cities. Transport for London data indicates traffic delays across Greater London increased by 20% from 2008/9 to 2014/15.<sup>1</sup> [Transport research analytics company, INRIX estimates](#) this congestion is costing the UK economy almost £6.9 billion annually through lost productive working hours.<sup>2</sup>

Congestion also has a health cost. Emissions of nitrogen dioxide (NO<sub>2</sub>) and Particulate matter (PM) from vehicles on the road have been linked to a range of health conditions including respiratory failure, strokes, heart attacks, dementia and premature death.<sup>3</sup> Levels of NO<sub>2</sub> in some urban areas across the UK have regularly breached European legal limits.<sup>4</sup>

The UK Population is forecast to grow, but this growth will be spread unevenly. In its horizon scanning report on the future of mobility, the [Government Office for Science](#) explains that such increases will place pressure on transport services unevenly.<sup>5</sup> For suburban areas, which are traditionally harder to serve by public transport than cities, first mile/last mile integration into existing public transport networks may be one solution. Accordingly, city planners and governments around the world are looking at ways to make urban transport simpler, cleaner and more efficient.

Micromobility devices – such as electric scooters (e-scooters), electric bikes (e-bikes) and other technologies – are seen as potential solutions to urban pollution and congestion as they could offer a new way of moving around towns and cities.<sup>6</sup>

While proponents of e-scooters say they should form part of the urban transport ecosystem, presently they cannot be ridden on roads, cycle lanes and tracks or pavements, under existing UK road traffic laws. The DfT published its [Future of Mobility: Urban Strategy](#) in 2019.<sup>7</sup> In this, the DfT said it would carry out a regulatory review that would consider options for appropriate regulatory regimes for e-scooters (and other micromobility devices) after commenting that it “was mindful of evolving technologies and the “blurring of previously long established vehicle definitions”.”<sup>8</sup>

<sup>1</sup> See Table 2 in TfL, [Traffic Note 4: Total vehicle delay for London 2014-15](#), May 2016, p.

<sup>2</sup> INRIX, [INRIX Global Traffic Scorecard: Congestion cost UK economy £6.9 billion in 2019](#), 9 March 2020

<sup>3</sup> WHO, [Ambient \(outdoor\) air pollution](#), 2 May 2018

<sup>4</sup> ClientEarth, [UK Air Pollution: How clean is the air you breathe?](#), 2 Oct 2019

<sup>5</sup> GO Science, [A time of unprecedented change in the transport system](#), Jan 2019, p. 59

<sup>6</sup> Tim Bradshaw & Emma Jacobs, [E-scooters zoom ahead as the future of commuting](#), *FT*, 6 Dec 2018

<sup>7</sup> DfT, [Future of Mobility: Urban Strategy](#), March 2019

<sup>8</sup> DfT, [Future of Mobility: Urban Strategy](#), March 2019

Initially, the [Government said](#) it expected to consult on proposals for regulatory reform in the autumn of 2019.<sup>9</sup> But, it was not until March 2020 that the DfT published its [Future of transport regulatory review call for evidence](#).<sup>10</sup> This sought views on three different areas: micromobility devices, flexible bus services and mobility as a service (MaaS). On micromobility devices, it asked “whether certain micromobility vehicles (such as electric scooters) should be permitted on the road, and if so what vehicle and user requirements would be appropriate”.<sup>11</sup>

In March 2020, the [Government committed to launch e-scooter trials](#) in four areas of England as part of its Future of Transport regulatory review [consultation](#).<sup>12</sup> In May 2020 the Transport Secretary, [Grant Shapps, said](#) that these trials would be brought forward to summer 2020 and opened up to more areas as part of the Government’s ‘green restart’ of local transport as the country comes out of the coronavirus pandemic.<sup>13</sup> You can read more about the e-scooter trials in [section 4](#).

This briefing paper provides an overview of the existing legal framework. It also analyses the arguments for and against legalising e-scooters on UK roads, drawing on the limited evidence from other countries and cities that have sanctioned their use.

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<sup>9</sup> [HL17027](#) [Electric Vehicles] 23 Jul 2019

<sup>10</sup> DfT, [Future of transport regulatory review: call for evidence on micromobility vehicles, flexible bus services and mobility as a service](#), 16 March 2020

<sup>11</sup> DfT, [Future of transport regulatory review: call for evidence on micromobility vehicles, flexible bus services and mobility as a service](#), 16 March 2020

<sup>12</sup> Department for Transport (DfT), [New transport tech to be tested in biggest shake-up of laws in a generation](#), 16 March 2020

<sup>13</sup> DfT, [£2 billion package to create new era for cycling and walking](#), 9 May 2020

## 2 Legislation

While it is legal to buy or sell an e-scooter, riding them on public roads, pavements or cycle lanes is currently against the law. This law will be relaxed for 12 months as part of the trials being rolled out across the country. E-scooters will remain illegal for use on the pavement everywhere, but, in trial areas, will be permitted for use on roads, cycle lanes and tracks.

### 2.1 Road Traffic Act 1988

E-scooters are covered by the same laws and regulations that apply to all motor vehicles.<sup>14</sup> This means e-scooters need to meet the various requirements of the [Road Traffic Act 1988](#) to use public roads lawfully (e.g. road tax, technical safety standards). The e-scooters currently on the market or available via hire schemes do not meet these requirements.

The 1988 Act ([section 34](#)) together with the *Highways Act 1835* ([section 72](#)) also bans e-scooters (or as the law refers to them ‘mechanically propelled vehicles’) from pavements, cycle paths and public footpaths. This means that riders could face a £300 fine and six points on their licence if they use them on public roads or pavements.

Riding e-scooters on private land is legal only with the landowner’s permission.

You can read more about the legal status of e-scooters in the Department for Transport’s (DfT) guidance on [powered transporters](#).

#### Legislating for e-scooter trials

The [Electric Scooter Trials and Traffic Signs \(Coronavirus\) Regulations and General Directions 2020](#) (SI 2020/663) provide the legislative basis for the e-scooter trials. They define ‘e-scooters’ and amend road traffic regulations to exempt e-scooters being used in a trial from certain requirements of the *Road Traffic Act 1988*. This framework closely resembles that for [electrically assisted pedal cycles \(EAPCs\)](#) (see box 2, above).

Regulation 2(3) of the [2020 Regulations](#) defines an e-scooter as a vehicle that:

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<sup>14</sup> DfT, [Powered transporters](#), 21 Aug 2019



- is fitted with an electric motor with a maximum continuous power rating not exceeding 500 watts;
- is not fitted with pedals that are capable of propelling the vehicle;
- has two wheels, one front and one rear, aligned along the direction of travel;
- is designed to carry no more than one person;
- has a maximum weight, excluding the driver, not exceeding 55 kgs;
- has a maximum design speed not exceeding 15.5 miles per hour;
- has a means of directional control through the use of handlebars which are mechanically linked to the steered wheel;
- has a means of controlling the speed through hand controls; and
- has a power control that defaults to the 'off' position.

There are two requirements in primary legislation that will continue to apply to e-scooters in the trials:

- E-scooters in trials need to be covered by a motor vehicle insurance policy – it is understood rental operators will ensure a policy is in place that covers users of the vehicles; and
- E-scooter users need to have a valid driving licence.<sup>15</sup>

Further, e-scooters not used as part of the trials will remain illegal on road, cycle lanes and tracks, and on pavements.

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<sup>15</sup> DfT, [E-scooter trials: guidance for local areas and rental operators](#), 1 July 2020

### 3 Impacts of e-scooters

E-scooters are battery-powered personal transport devices that appear to offer solutions to a wide range of transport policy goals:

They require less effort than riding a bicycle;

They are potentially more convenient than bus travel; and

They are less polluting than conventional petrol and diesel vehicles.

Manufacturers and proponents of e-scooters alike claim e-scooters could help to reduce congestion and improve air quality by getting people out of their cars, while supporting first and last mile transport to and from public transport terminals.<sup>16</sup> E-scooters could also offer a simple and cheap means to get around for those less physically able or mobile.<sup>17</sup>

The Parliamentary Advisory Council for Road Safety (PACTS) has questioned whether these benefits will be realised. In its [policy paper on e-scooters](#) it states:

*From evidence and experience around the world, it is now very clear that the public benefits are illusory and the disbenefits substantial, at least in a European context. As such, e-scooters will work against many of the government's objectives. PACTS therefore opposes the trials and wider legalisation of e-scooters.<sup>18</sup>*

Indeed, many cities are concerned that e-scooters could pose similar problems (such as obstructed pavements and vandalism) to those experienced by the introduction of [dockless bike hire schemes](#)<sup>19</sup>.

This section of the briefing discusses in more detail the potential benefits claimed for e-scooters and stakeholder views on whether they are likely to be achieved.

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<sup>16</sup> DfT, [Future of Transport Regulatory Review Call for Evidence](#), p. 20

<sup>17</sup> DfT, [Future of Transport Regulatory Review Call for Evidence](#), p. 20

<sup>18</sup> PACTS, [e-scooters – cool but where are the benefits? PACTS' position on the trials and legalisation of e-scooters in the UK](#). Accessed online: 30 June 2020

<sup>19</sup> Niamh McIntyre & Julia Kollwe, [Life cycle: is it the end for Britain's dockless bike schemes?](#), *Guardian*, 22 Feb 2019

## 3.1

### Active travel and mode shift

The Government believes that micromobility devices such as e-scooters could “offer a new way of moving around [...] as an alternative to making short journeys by car”.<sup>20</sup> If e-scooter journeys were to replace those taken by car – particularly drivers travelling singly in private vehicles into urban centres – this could help to reduce congestion and improve air quality in urban areas.

The Government has said that presently there is “limited evidence” available about the impact of e-scooters on the road network. In response to a PQ in June 2020, [Transport Minister Rachel Maclean said](#): “Recent evidence from European cities suggests around 15-20% of e-scooter journeys could replace journeys by car”.<sup>21</sup>

Sustrans (a UK walking and cycling charity) is concerned that e-scooter trips could in fact “replace trips that would otherwise be walked, cycled, taken by kick scooters or by public transport”.<sup>22</sup> This would negate any hoped-for congestion-alleviating benefits and could have negative health impacts by reducing physical activity; the benefits of physical activity are well-known – the former Chief Medical Officer described it as a “wonder drug” – and even small increases in activity levels can have marked health benefits.

Sustrans says that “more needs to be done if e-scooters are legalised in the UK to ensure that, as a mode of transport, they replace driving as opposed to walking and cycling”.<sup>23</sup>

One of the Government’s stated intentions for its e-scooter rental trials is to “gather evidence about the impacts of e-scooters including what mode shift they cause”.<sup>24</sup>

## 3.2

### Environmental impacts

E-scooters are often [promoted for their environmental credentials](#), but some studies indicate their short life span makes them far from sustainable.

As set out in section 3.1, above, if e-scooter journeys replace journeys that would have been otherwise made by car (itself uncertain), they may help alleviate air pollution and make carbon savings.

However, the short lifespans of e-scooters means the potential environmental benefits may not be realised. Analysis from the Boston Consulting Group

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<sup>20</sup> DfT, [Future of Transport Regulatory Review Call for Evidence](#), p. 20

<sup>21</sup> [PQ 57277](#) [Electric Scooters] 17 June 2020

<sup>22</sup> Sustrans, [Our position on e-scooters](#), 1 Jan 2019

<sup>23</sup> Sustrans, [Our position on e-scooters](#), 1 Jan 2019

<sup>24</sup> [PQ 57277](#) [Electric Scooters] 17 Jun 2020

estimates that the average lifespan for rental e-scooters is just three months.<sup>25</sup> Three of the major e-scooter rental companies – Voi, Lime and Bird – all told the Transport Committee that their newest e-scooter models have an operational lifetime of two years or more.<sup>26</sup>

The lifecycle emissions of e-scooters can be broken down into three stages: vehicle manufacture; daily use and (re)charging; and vehicle disposal. One 2019 [study that looked at the lifecycle environmental impacts of e-scooters](#) reported the global warming impact for an e-scooter is “202 g CO<sub>2</sub>-eq/passenger-mile”.<sup>27</sup> This is a bigger carbon impact than for the newest, most efficient petrol/diesel motor vehicles, largely because of the longer life of a car versus an e-scooters. One of the study’s authors commented to *MIT Technology Review* that:

*...roughly two-thirds of the time, scooter rides generate more greenhouse-gas emissions than the alternative. And those increased emissions were greater than the gains from the car rides not taken.*<sup>28</sup>

Lime, one of the largest e-scooter companies, questioned the study’s findings and argued that “this study is largely based on assumptions and incomplete data that produces high variability in the results”.<sup>29</sup>

There may be scope for efficiencies in the e-scooter market as it develops. The lifespan of e-scooters could increase and the impact per kilometre travelled could decrease accordingly. E-scooter rental companies could also make carbon savings by changing the way they collect and charge their e-scooters, for example, by:

- Utilising low or zero carbon vehicles to collect e-scooters; and
- Targeting collection of e-scooters, so that only those e-scooters with low or no batter charge are picked up

The study looking at lifecycle emissions found that reducing the average driving distance for collection and distribution to 0.6 miles per scooter reduces the average life cycle global warming impacts by just over a quarter.<sup>30</sup>

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<sup>25</sup> Boston Consulting Group, [The Promise and Pitfalls of E-Scooter Sharing](#), 16 May 2019

<sup>26</sup> Transport Committee, Third Report of Session 2019–21, [E-scooters: pavement nuisance or transport innovation?](#) Sept 2020, para 116

<sup>27</sup> Joseph Hollingsworth, Brenna Copeland and Jeremiah X Johnson, [Are e-scooters polluters? The environmental impacts of shared dockless electric scooters](#), *Environmental Research Letters*, **Vol 14**; **8**, 2 Aug 2019

<sup>28</sup> James Temple, [Sorry, scooters aren’t so climate-friendly after all](#), *MIT Technology Review*, 2 Aug 2019

<sup>29</sup> As quoted in James Temple, [Sorry, scooters aren’t so climate-friendly after all](#), *MIT Technology Review*, 2 Aug 2019

<sup>30</sup> Joseph Hollingsworth, Brenna Copeland and Jeremiah X Johnson, [Are e-scooters polluters? The environmental impacts of shared dockless electric scooters](#), *Environmental Research Letters*, **Vol 14**; **8**, 2 Aug 2019

## 3.3

### Safety

There are two safety-related aspects of e-scooters: the safety of scooter riders and the safety of other road users, particularly pedestrians and those with a disability.

Safety concerns for users of e-scooters were headline news in the summer of 2019, with [reports of the first e-scooter fatality on British roads](#). Safety was one of the key areas on which the Government sought stakeholder views as part of its Regulatory review. In particular, it asked for evidence as to:

- whether micromobility vehicles are physically robust and safe by design;
- whether users have the skills to use them safely;
- how micromobility vehicles interact with other vehicles, road users and pedestrians; and
- how liability is handled when accidents occur.<sup>31</sup>

### Vehicle standards

According to the Bicycle Association – a trade body for the bicycle industry – there is ongoing international work to create an e-scooter safety standard.<sup>32</sup> However, some people question whether e-scooters designs are inherently unsafe. Key concerns for e-scooter vehicle standards centre on their weight limits, power, braking, lighting and wheel size.

The Government’s consultation did not seek specific views on these vehicle standards questions, but rather asked about what the minimum standards for micromobility vehicles should be.<sup>33</sup>

Some have drawn comparisons between e-scooters and e-bikes, suggesting that there should be similar vehicle standards.<sup>34</sup> You can read more about how e-bikes (EAPCs or electrically assisted pedal cycles) are regulated in box 1.

### 1 E-bike regulations

You [can ride an electric bike \(e-bike\)](#) in England, Scotland and Wales if you are aged 14 or over, as long as it meets certain requirements. There are different rules in [Northern Ireland](#). The GB requirements are set out in the [Electrically](#)

<sup>31</sup> DfT, [Future of Transport Regulatory Review Call for Evidence](#), p. 20

<sup>32</sup> Bicycle Association, [E-scooters: the Bicycle Association position](#), July 2019

<sup>33</sup> DfT, [Future of Transport Regulatory Review Call for Evidence](#), p. 25

<sup>34</sup> Philip Darnton Bicycle Association as quoted in: BBC, [E-scooters' UK speed limit 'shocks' blindness charity](#), 1 July 2020

[Assisted Pedal Cycles \(Amendment\) Regulations 2015](#) (EAPC Regulations). The requirements are:

- The cycle must be fitted with pedals that are capable of propelling it.
- The maximum continuous rated power of the electric motor must not exceed 250 Watts.
- The electrical assistance must cut-off when the vehicle reaches 15.5 mph.

Separate regulations specify the standards e-bikes must meet when sold for use, or used, on a public road. The main requirements cover:

- Brakes
- information about the vehicle
- lights and reflectors

For more information, see the DfT's [guidance on the specific requirements of e-bikes](#) (2015).

## Injuries and accidents

The Government's Regulatory review says, "robust accident data is not yet available, as e-scooter use is a relatively new phenomenon".<sup>35</sup> Of the studies that have been carried out, the findings have pointed to:

- **Higher risk of head injuries** when riding e-scooters. A [study of US e-scooter-related injuries and hospital admissions](#) found nearly a third of the patients suffered head trauma "more than twice the rate of head injuries to bicyclists".<sup>36</sup>
- **Novice riders being at greater risk.** A [study of dockless electric scooter-related injuries in Austin, Texas from 2018](#) observed: "Overall, 63% of the injured riders had ridden an e-scooter nine times or fewer before injury". The study recommendation additional training to address this.<sup>37</sup>
- **E-scooter injuries only rarely involved motorised vehicles** according to the same Texas study which reported that "while more than half of the interviewed riders were injured while riding a scooter in the street, few (10%) riders sustained injuries by colliding with a motor vehicle."<sup>38</sup>

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<sup>35</sup> DfT, [Future of Transport Regulatory Review Call for Evidence](#), p. 2

<sup>36</sup> Nikan K. Namiri, Hansen Lui, Thomas Tangney, Isabel E. Allen, Andrew J. Cohen, Benjamin N. Breyer. [Electric Scooter Injuries and Hospital Admissions in the United States, 2014-2018](#). *JAMA Surgery*, 2020

<sup>37</sup> Austin Public Health, [Dockless Electric Scooter-Related Injuries study](#), April 2019

<sup>38</sup> Austin Public Health, [Dockless Electric Scooter-Related Injuries study](#), April 2019

- **Excessive e-scooter speed contributed to many injuries** in the Texas study, which reported: “More than one-third (37%) of injured riders reported that excessive e-scooter speed contributed to their injury”.<sup>39</sup>

Governments may be able to mitigate some of these risks through general improvements to roads. In its 2019 safety report, the e-scooter rental company Bird claimed that e-scooters and bicycles have similar risks and vulnerabilities. Accordingly, it says safer roads for e-scooter riders could contribute to safer roads for all.<sup>40</sup>

In countries where e-scooters can be ridden legally, governments have taken (or considered taking) various steps to ensure the safety of e-scooter riders and other road users, including:

- **Speed limits**, such as in France where e-scooters are limited to 25km/h (15.5mph) and in Germany where the limit is 20km/h (12.5mph).<sup>41</sup>
- **Mandating wearing helmets**, as in several Australian states.<sup>42</sup>
- **Age restrictions**, such as in Germany where riders must be aged 14 or over.<sup>43</sup>
- **Restricting their use to roads and/or cycle lanes**, such as in Madrid, which introduced restrictions on where e-scooters can be ridden in its October 2019 mobility plan.<sup>44</sup>
- **Requiring certain safety equipment on e-scooters**, such as lights, bells, and reflective materials as in Germany.<sup>45</sup>

E-scooter rental operators may also be able to provide variable speed limiters on their e-scooters. This could allow for lower speed limits in more built up areas. According to Lime’s Director of Policy Alan Clarke, when setting up a new operation:

What we do is get a map of the city, and we will draw on areas that the GPS sensor on our scooter will sense when you go to those areas, and your speed will automatically lower. For us it is a key safety feature. We will work very closely with local authorities to identify where these zones should go and make sure that that is how we can ensure that the speed is always appropriate for the road conditions and the space.<sup>46</sup>

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<sup>39</sup> Austin Public Health, [Dockless Electric Scooter-Related Injuries study](#), April 2019

<sup>40</sup> Bird, [A Look at e-Scooter Safety: Examining risks, reviewing responsibilities, and prioritizing prevention](#), April 2019

<sup>41</sup> [E-scooter regulations in Germany and France](#), *Eltis*, 26 Jun 2019

<sup>42</sup> Cate Swannel, [E-scooters: helmet use, road rules need enforcing](#), *Medical Journal Australia*, 30 Sept 2019

<sup>43</sup> [E-scooter regulations in Germany and France](#), *Eltis*, 26 Jun 2019

<sup>44</sup> Raffaele Vergnani, [Madrid's new Mobility Plan places restrictions on electric scooters](#), *Eltis*, 8 Oct 2018

<sup>45</sup> [E-scooter regulations in Germany and France](#), *Eltis*, 26 Jun 2019

<sup>46</sup> [Oral evidence: e-scooters](#), 15 July 2020, **HC 255**

## Licencing, liability and insurance

Insurance requirements differ across modes of transport. Motor vehicles are legally required to have insurance, while bicycles and e-bikes (electrically assisted pedal cycles) do not. Individual cyclists may take out their own third-party insurance but are not required to do so.

The limited legalisation of e-scooters on UK roads for e-scooter rental trials (see section 4, below) raises the questions as to how e-scooters will be treated for insurance purposes.

In many other countries, e-scooter rental companies typically offer [limited liability insurance](#), but also make riders sign rental agreements whereby the customer accepts responsibility for any accident (See for instance the [rental agreement riders of Bird's e-scooters](#) in Canada are subject to).

The Government has announced that it would [not implement the amendments to the EU motor insurance directive](#), following the so-called ECJ Vnuk judgement. There had been an open question as to whether riders of micromobility devices would need to have insurance following on from the ECJ Vnuk judgement (on the Motor Insurance Directive).

In evidence to the Transport Committee in July 2020 ahead of the launch of any of the trials all three e-scooter operators Bird, Lime and Voi said they would provide third-party motor insurance policies for any of the trials they became involved with. But, cautioned that the broader questions around insurance would become more complicated if, and when, the UK Government legalised private use of e-scooters.

It is a requirement for all users of e-scooters in the trials to have a driver's licence or provisional driver's licence.

In evidence to the Transport Committee, Emma Silver, Bird's Head of Public Policy, identified what she saw as two problematic elements of the Government's framework for e-scooter trials: The requirement for a driver's licence or a provisional driver's licence; and the requirement for motor insurance. She said:

Both those things put electric scooters out of step with electric bikes. Due to the similarities between electric bikes and electric scooters, we would like these two requirements to be dropped from the electric scooter legislation. However, we do understand that bringing forward trials quickly has meant the trade-off of keeping those requirements for now.<sup>47</sup>

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<sup>47</sup> [Oral evidence: e-scooters](#), 15 July 2020, HC 255



Further, academics Dr Sheriff and Professor Anable expressed concerns to the Transport Committee over the driving licence requirement on the grounds “It seems very limiting for the social inclusion potential.”<sup>48</sup>

## Accessibility

When parked on pavements, e-scooters increase the amount of ‘street clutter’, presenting obstacles to pedestrians, particularly those with disabilities. Conversely, e-scooters could offer new transport choices for those who are less mobile, and who would otherwise take a car for short journeys. The Government’s regulatory review emphasises the need to strike a balance between these two positions.<sup>49</sup>

In June 2020, the National Federation of the Blind UK (NFBUK) wrote to the DfT warning e-scooters contribute to a “dangerous, frightening, intimidating and hostile” urban environment for blind and visually impaired people.<sup>50</sup> Andrew Hodgson, president of NFBUK, said:

*It is also clear from practical experience, dockless e-scooters simply do not work as the machines can end up anywhere in the city.*

*This causes totally random potential barriers to access across city pavement and public space for disabled and elderly people and mothers with buggies.<sup>51</sup>*

On 1 July 2020, Eleanor Southwood, chair of the RNIB board, told the Transport Committee the top speed and weight of the e-scooters were higher than they should be:

*It’s really clear that even with all of the safeguards... we do consider e-scooters to be a real and genuine threat to the ability of blind and partially sighted people to move around independently and safely.”*

*She said the RNIB was “really surprised to see the 15mph speed limit yesterday, which is a lot faster than we had anticipated”.<sup>52</sup>*

Many cities with e-scooter rental services have experienced problems with e-scooters being dumped and blocking pavements. In Paris, e-scooter operators signed up a voluntary ‘good conduct’ agreement to help tackle these problems.<sup>53</sup> The French Government also introduced new laws that require e-scooters to be parked in parking stands, and not left on the pavement.<sup>54</sup>

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<sup>48</sup> [Oral evidence: e-scooters](#), 1 July 2020, **HC 255**

<sup>49</sup> DfT, [Future of Transport Regulatory Review Call for Evidence](#), p. 20

<sup>50</sup> Road Safety GB, [Race to legalise e-scooters ‘not safe or sensible’](#), 16 June 2020

<sup>51</sup> Road Safety GB, [Race to legalise e-scooters ‘not safe or sensible’](#), 16 June 2020

<sup>52</sup> BBC, [E-scooters’ UK speed limit ‘shocks’ blindness charity](#), 1 July 2020

<sup>53</sup> Alex Ledson, [E-Scooter Havoc Across French Cities. Is A Crackdown Needed?](#), *Forbes*, 10 Sept 2019

<sup>54</sup> Alex Ledson, [E-Scooter Havoc Across French Cities. Is A Crackdown Needed?](#), *Forbes*, 10 Sept 2019

E-scooter rental operators also say they have technology which allows them to see when customers are misusing their e-scooters. For example, if someone repeatedly rides on the pavement, the operator can track this, remind them of the law, and if necessary, remove their access to the app.<sup>55</sup>

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<sup>55</sup> [Oral evidence: e-scooters](#), 15 July 2020, HC 255

## 4 E-scooter trials, 2020-21

The UK is an outlier in Europe and much of the rest of the world, in not allowing e-scooters on roads, pavements, or in cycle lanes. The Government's 2020 [Regulatory review](#) set out plans to run e-scooter rental trials in four "Future Transport Zones":

- Portsmouth and Southampton;
- the West of England Combined Authority;
- Derby and Nottingham; and
- the West Midlands.

As a result of its plans for a 'green transport restart' to the economy following the coronavirus pandemic, the Government announced on 18 May 2020 that it would accelerate and extend the geographic scope of these trials and sought public views.<sup>56</sup>

The DfT published the outcome to this consultation on 30 June 2020.<sup>57</sup> It said that it was "working with several local authorities and e-scooter operators who have expressed an interest in participating to deliver trials in areas throughout the country".<sup>58</sup>

### 4.1 E-scooter trials announcement, June 2020

On 30 June 2020, the [Transport Minister Rachel Maclean confirmed](#) the Government's intention to permit local areas to run e-scooter trials from 4 July 2020.<sup>59</sup> The Government also laid [Regulations](#) in Parliament to enable the trials to take place, and published [guidance for areas and rental operators](#). All local areas in England, Scotland and Wales can consider participating in e-scooter rental trials; however, the final decision on which trials take place sits with the DfT and all trial proposals will be assessed.<sup>60</sup>

## 2 E-scooter trials: What is happening?

<sup>56</sup> DfT, [£2 billion package to create new era for cycling and walking](#), 9 May 2020

<sup>57</sup> DfT, [E-scooter rental trials: outcome and summary of responses](#), 30 June 2020

<sup>58</sup> DfT, [E-scooter rental trials: outcome and summary of responses](#), 30 June 2020

<sup>59</sup> DfT, [Rental e-scooter trials to be allowed from this weekend](#), 30 June 2020

<sup>60</sup> DfT, [E-scooter rental trials: outcome and summary of responses](#), 30 June 2020

Local areas can opt in to run e-scooter trials providing they meet the high-level requirements and objectives. The scope of the trials are as follows:

- E-scooters are allowed on roads and cycle lanes, but are banned from pavements;
- E-scooters will be limited to 15.5 mph
- Riders are recommended to wear helmets, but this will not be mandatory.
- Privately owned e-scooters remain illegal everywhere.
- Riders will need a full or provisional car, motorcycle or moped licence to use the vehicles, and they must be aged 16 or over.

It was the Government's intention for local areas that wish to hold an e-scooter trial to work with the DfT and e-scooter operators to design trials to begin by August 2020 and run for 12 months. DfT said it would:

- coordinate and support the development of proposals, working closely with local areas
- prepare and introduce the legal changes that allow trials to proceed
- let and manage a contract for central monitoring and evaluation across all trial areas
- provide final approval for trial proposals that meet our requirements<sup>61</sup>

The DfT expected local areas to:

- consider their trial requirements and objectives together with those set out by the department
- work openly with e-scooter operators to understand how they can meet those requirements
- put in place proportionate processes to assess, select and ultimately procure services from operators<sup>62</sup>

## 4.2

### Stakeholder views on the trials

The Government consulted on e-scooter trials in May-June 2020. It received 2,193 responses (2,017 responses from individuals and 176 from

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<sup>61</sup> DfT, [E-scooter trials: guidance for local areas and rental operators](#), 1 July 2020

<sup>62</sup> DfT, [E-scooter trials: guidance for local areas and rental operators](#), 1 July 2020

organisations).<sup>63</sup> The main issues the consultation sought views on and the Government's summary of responses to them was as follows:

- **The proposed definition of 'e-scooter':** there were mixed views and calls for additional requirements for light reflectors, bells and horns for audible warnings, wheel size, and maximum braking distance at full speed.
- **Maximum permitted speeds (12.5 or 15.5 mph):** the majority of respondents supported the faster speed limit. Respondents suggested this would help e-scooters navigate inclines, facilitate smoother traffic flows and harmonise legislation with that for e-bikes (which have a maximum speed limit of 15.5 mph).
- **Maximum motor power for e-scooters:** respondents were split evenly as to whether there needed to be a limit set out in legislation.
- **Restricting the trial scheme to people with either full and/or provisional licence holders:** largely supported on the basis that licence holders have greater road awareness. However, some respondents suggested mandatory training would be more appropriate.
- **Relaxing requirements for wearing motorcycle helmets:** widely supported because of the slower speeds of e-scooters. Some suggested bicycle helmets should be mandatory for the trials.
- **Where e-scooters should be allowed to be ridden (roads, cycle lanes, pavements):** general support for their use on roads, cycle lanes and tracks, where possible, but not on pavements or motorways.<sup>64</sup>
- The consultation also received views on additional themes including:
  - concerns around the enforcement of any regulations
  - the process for ensuring vehicles could be maintained in a roadworthy state
  - the process for ensuring e-scooters were not dumped after use, with some responses favouring docks
  - requests for e-skateboards to be used in the trial
  - whether the design of the trial e-scooters would allow items to be carried (not hung on handle bars)
  - rules around drink and drug driving
  - the need to differentiate trial e-scooters from those that are still illegal

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<sup>63</sup> DfT, [E-scooter rental trials: outcome and summary of responses](#), 30 June 2020

<sup>64</sup> DfT, [E-scooter rental trials: outcome and summary of responses](#), 30 June 2020

- the process for disinfecting shared scooters after use<sup>65</sup>

## Transport Select Committee inquiry, 2020

The Commons Transport Committee launched [an inquiry into e-scooters](#) in April 2020, and [published their report in September 2020](#). The report's title – pavement nuisance or transport innovation? – neatly summarises the fundamental challenge for allowing e-scooters to be used on GB roads. In their report, the Committee:

- Welcomed the Department's work to examine the legal status of e-scooters, which they said should draw on lessons from other countries so as to avoid potential negative impacts on pedestrians and disabled people.
- Viewed the rental trials as an important step to:
  - help determine the best way to legally incorporate both rental and privately-owned e-scooters within the UK transport mix.
  - Assess how the growth of e-scooters has affected other transport usage, and thus the modal shift which may occur as e-scooters continue to grow in popularity.
- Felt it was essential the trials take place in a diverse set of locations, including both city centres, suburban areas and market towns where other transport options are not as readily available.
- Noted concerns that the requirement to have a driving licence to take part in the trials could mean a key target demographic for the rental schemes will be excluded.
- Called for speed limits in the trials to be determined at the local level by local authorities and, in the case of rental e-scooters, via 'geo-fencing' technology installed by companies. Geofencing uses GPS to broadcast an electronic fence around a designated area either stopping or slowing the e-scooter down.
- Called for various actions to:
  - monitor and discourage riding e-scooters on pavements during rental trials
  - the Department, working with local authorities, to monitor the trials to determine whether any problems are developing with scooters being left on pavements as 'street clutter'.

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<sup>65</sup> DfT, [E-scooter rental trials: outcome and summary of responses](#), 30 June 2020

- Ensure the e-scooter companies operate in a sustainable fashion, noting uncertainty around the environmental impacts of e-scooters.

The [Government response](#) to the Committee report was published in December 2020.

## Views of police chiefs

There have been various comments made by different police chiefs and police and crime commissioners during the e-scooter trial period.

- Northamptonshire’s police chief Nick Adderley has [called on the Government to step up regulating private e-scooters](#). He told the Northamptonshire Telegraph:

believe there's much more we have to do with the government to make sure regulations can be tightened on the way these scooters are ridden, where they are ridden and the enforcement of it.

If they are ridden sensibly then they should reduce congestion and make our air cleaner. But we are not seeing that just yet and we've got a few stages to go through before we can say this is a good thing.

- Matthew Scott, Kent's Police and Crime Commissioner, wrote to the Transport Secretary Grant Shapps [urging the Government to halt e-scooter trials](#). He said,

Inconsiderate riders are becoming a menace on our roads and pavements, ignoring the law and causing dangers for other road users. We urgently need decisive action now on their future, as we're in danger of losing control of the issue and placing additional burdens on policing.

Too many people are using them in places they shouldn't and we need to stop them being bought for young people

## 4.3

## Where e-scooter rental trials are taking place

In July 2020, the *Independent* reported that “at least 50 local authorities” were in talks with different companies about launching e-scooter rental operations.<sup>66</sup> The Government lists [32 areas in which there are trials taking place](#), including a mixture of towns (e.g. Slough) and cities (e.g. Newcastle),

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<sup>66</sup> Colin Drury, [Clean, green – and dangerous? First e-scooter trial launches in Middlesbrough, but opinion is divided](#), *Independent*, 15 Jul 2020

local authorities (e.g. North Devon) and mayoral combined authority areas (e.g. West Midlands).

## 4.4 Evaluation of the trials

In 2021, the Government awarded an evaluation contract to Arup, working in partnership with social researchers, Nat Cen. The Department has identified the key areas it will gather information on as part of the evaluation:

- Safety outcomes for e-scooter users and what influences this
- Interaction with, and effect on, other road users
- Public perceptions of e-scooters, including people with disabilities and related groups
- Nature of modal shift and new journeys that have been enabled. \*details of trips made: how far, routes, speed
- Characteristics of users, and how uptake and outcomes differ for different groups
- Local authority perception of effects on their transport system
- Lessons for future rollout
- What a future regulatory system for the future should include, such as speed, vehicle standards or licensing
- Any other unexpected outcomes
- Overall costs and benefits to society <sup>67</sup>

PACTS (the Parliamentary advisory council for transport safety) is collecting data on e-scooter incidents during the trial. Its latest data for 2021 to mid-August includes 104 injury-collisions within the UK to date, in which there were 10 fatal and 56 serious injuries. This included 20 head injuries. In the previous two years (2019 and 2020) there were three deaths.<sup>68</sup> This includes all incidents involving e-scooters, not just those involved in the Government's trials.

You can view the [spreadsheet of casualty data here](#).

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<sup>67</sup> [Letter: Transport Minister to Transport Committee Chair](#), 23 March 2021

<sup>68</sup> PACTS, [Assessing the safety of private e-scooter use in the UK – PACTS research](#), 16 Jun 2021



## 4.5

### When do the trials end?

Launching the trials, the Government said it wanted to see the majority commence by August 2020 and run for 12 months, with all the trials finished by November 2021. From start, the Government built in scope for the trials to continue beyond this 12-month period – subject to local/national government agreement.

There have since been delays launching many of the trials. For instance, plans for a trial to take place in London were slow to get off the ground, and only launched in June 2021. Consequently, the trial end date has been extended to 31 March 2022.

On 7 May 2021, an article on the RAC’s website noted fears that this delay would mean “more unregulated and out-of-control privately-owned devices will continue to pose a safety hazard for road users”.<sup>69</sup> A DfT spokesperson told the RAC: “To ensure we get the most comprehensive evidence from trials, including those that have started more recently, the end date for trials has been extended to 31 March 2022.”<sup>70</sup>

Earlier in 2021, in a letter to the Transport Committee Chair, Transport Minister Rachel Maclean said the evaluation of the trials had been “designed from the outset with the knowledge that some locations will not have completed a full 12-month cycle” which meant the interpretation of findings are all achievable without all locations reaching the 12 month point.<sup>71</sup>

## 4.6

### Policing e-scooters during the trial

Riding a private e-scooter in a public place is illegal and punishable by a £300 fixed penalty notice (FPN) and six penalty points on a person’s driving licence.

Persons can also be found guilty of other road traffic offences while riding an e-scooter – whether it is being used legally in an e-scooter trial or whether it is a privately owned e-scooter being ridden illegally. This is because e-scooters are legally classified as a motor vehicle. This means road traffic offences, such as drink or drug driving, rising on a footway and others could be brought against an individual:

- riding on the footway: Fixed Penalty Notice and possible £50 fine
- using a mobile phone: £100 and six penalty points

<sup>69</sup> RAC, [‘Dithering and delay’ on e-scooter trials prompts new safety fears](#), 7 May 2021

<sup>70</sup> RAC, [‘Dithering and delay’ on e-scooter trials prompts new safety fears](#), 7 May 2021

<sup>71</sup> [Letter: Transport Minister to Transport Committee Chair](#), 23 March 2021

- riding through red lights: Fixed Penalty Notice, £100 fine and possible penalty points
- drink or drug driving offences: As with driving cars; court imposed fines, driving ban and possible imprisonment

Further, if someone is found to be riding an e-scooter in public in an anti-social manner, they risk the e-scooter being seized under section 59 of the Police Reform Act.

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