



accidents don't have to happen

E-scooters: pavement nuisance or transport innovation?

RoSPA's Response to the Transport Committee's Call for Evidence

Date: May 2020



Response to Transport Committee's Call for Evidence: E-scooters: pavement nuisance or transport innovation?

Introduction

This is the response of The Royal Society for the Prevention of Accidents (RoSPA) to the Transport Committee's call for evidence on e-scooters. It has been produced following consultation with RoSPA's National Road Safety Committee.

The committee is calling for written evidence on:

- whether the legislation for e-scooters is up to date and appropriate;
- to what extent e-scooters have positive benefits, for instance relating to congestion and promoting more sustainable forms of transport;
- where in the urban environment e-scooters could be used (e.g. road, pavement, cycle lanes), and how this could impact on other road users and pedestrians, including people who have visual impairments or use mobility aids;
- whether there should be advice or compulsory requirements to use specific safety equipment when using an e-scooter;
- whether there should be safety and environmental regulation for the build of e-scooters, and what this might entail; and
- the experience of other countries where e-scooters are legal on the roads



Response to Transport Committee's Call for Evidence: E-scooters: pavement nuisance or transport innovation?

E-scooter 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. If these vehicles are to be legalised, changes must be made to current regulation.

E-scooters are classed as a '[powered transporter](#)' and are covered by the same laws and regulations that apply to all motor vehicles. Under current laws, powered transport must fall into one of three broad categories: cars and motorcycles, which require licences, MOT checks and registration; electric bikes, which are effectively treated as normal bicycles provided they are pedal-assist; and electric wheelchairs and mobility scooters, which have a special allowance to be used on pavements¹. As such, e-scooters would need to meet the different requirements (e.g. road tax, technical safety standards) of the *Road Traffic Act 1988* to use public roads lawfully. Currently, e-scooters on the market cannot do so. Gov.uk says that if manufacturers think their design does meet all the technical requirements needed for power transporters, they can submit it to the Driver and Vehicle Standards Agency (DVSA) for approval.

Also, the 1988 Act ([section 34](#)) together with the *Highways Act 1835* ([section 72](#)) 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, however, completely legal – with the landowner's permission².

Despite the absence of legislation enabling legal use of e-scooters on public roads, e-scooters are being sold in Britain and therefore, legislation now seems to be outdated.

E-bikes are referred to as Electrically Assisted Pedal Cycles (EAPCs) in UK legislation. One way to differentiate micromobility vehicles would be by creating a new category analogous to EAPCs which are not treated as motor vehicles in the Road Traffic Act 1984, class 140. For example, this could be called 'Electrically Powered Standing Scooter' EPSS, defined as: 'scooter with two wheels in line, propelled by an electric motor, designed to be ridden by a single rider in a standing position, with braking and propulsion controls fitted to a handlebar in front of the rider'.

RoSPA are pleased that the Department for Transport and Transport Committee are consulting on the use of micromobility vehicles and that the legislation is beginning to catch up to the modernisation of our roads, but it is important that this is done in a properly-regulated way with appropriate measures to ensure that users of e-scooters and other road users are safe, and sufficient integration into the existing transport infrastructure.

¹ The Guardian. Electric scooters to get green light to go on Britain's public roads.

<https://www.theguardian.com/politics/2020/mar/16/electric-scooters-get-green-light-to-go-on-britains-public-roads>. March 2020.

² House of Commons Library. E-scooters: Why are they not legal on UK roads?

<https://commonslibrary.parliament.uk/science/technology/e-scooters-why-are-they-not-legal-on-uk-roads/>. August 2019.



Response to Transport Committee's Call for Evidence: E-scooters: pavement nuisance or transport innovation?

Benefits of e-scooters

RoSPA believe that with the right regulatory framework, micromobility vehicles, such as e-scooters, could offer benefits for individuals and society.

E-scooters offer a new way of moving around. They can make journeys quicker and easier, particularly where there are limited public transport alternatives. They could provide a substitute to making short journeys by car. However, RoSPA are concerned that people may choose electric scooters over more active modes of travel, such as cycling and walking. There is currently little evidence from countries where e-scooters are permitted to show a modal shift either away from motorised transport or from walking and cycling. If the regulations are changed to allow the use of e-scooters on the road, RoSPA would like further research to show whether there is a positive modal shift away from less sustainable forms of transport.

If journeys by e-scooters replace those that would otherwise be made by car, this could help reduce carbon emissions from road transport and improve air quality in towns and cities. Traditional motor vehicles are inherently inefficient due to the fact they use lots of energy in order to pull their own weight – one kilowatt hour (kWh) of energy allows a petrol-powered car to travel less than a mile. For example, when using an electric scooter, one kWh provides 80 miles of travel. Coupled with their reduced usage outputs due to an electric motor, they are much more energy efficient and environmentally friendly to use. When the inefficiencies of motor vehicles are paired with congestion, a problem that is rife in cities, there is a huge environmental impact. The Royal College of Physicians estimate that deaths due to exposure to air pollution result in a social cost of £20 billion per year³, and 80% of the concentration of nitrogen oxides (significant environmental pollutants) at the roadside are caused by road transport⁴.

As well as being cheaper to purchase than traditional motor vehicles, e-scooters do not depend on traditional fuels, allowing them to have much lower running costs. Therefore, they result in affordable travel, meaning more members of the population can access transport⁵ – a large scale survey in the US found that lower-income groups were more supportive of electric scooter sharing services than the rest of the population⁶. E-scooters are also more accessible in terms of the fact a license is not typically required to use them.

As they are smaller than conventional vehicles, they may also reduce congestion. Motor vehicles, particularly cars, are incredibly popular in cities. With 74% of adults possessing a driving license, and 87% of UK motorists agreeing

³ Royal College of Physicians. Every breath we take: the lifelong impact of air pollution.

<https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution> Updated February 2016.

⁴ Gov.uk. Air quality plan for nitrogen dioxide (NO₂) in UK (2017). <https://www.gov.uk/government/publications/airquality-plan-for-nitrogen-dioxide-no2-in-uk-2017>. Updated October 2018. Cited by: Department for Transport. Future of Mobility: Urban Strategy.

⁵ Department for Transport. Future of Mobility: Urban Strategy.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/786654/future-of-mobility-strategy.pdf Updated March 2019.

⁶ Clewlow R. The Micro-Mobility Revolution: The Introduction and Adoption of Electric Scooters in the United States. Transportation Research Board. 2018;1(1):1



Response to Transport Committee's Call for Evidence: E-scooters: pavement nuisance or transport innovation?

that their current lifestyle requires a car⁷, congestion is becoming a huge problem. As well as the serious environmental impact congestion is having, there is also an impact on the economy – the time lost due to congestion costs the UK economy approximately £2 billion every year⁸. The 2017 British Social Attitudes Survey found that 56% of respondents perceived congestion in towns and cities to be a serious or very serious problem⁹. The use of micromobility vehicles could make a significant difference to city congestion, particularly when used for the last part of an individual's commute: 46% of US car traffic is caused by individuals on journeys less than 3 miles long¹⁰.

Micromobility vehicles can also provide new transport choices for some disabled or older people, for example, for those who are less able to walk medium to long distances and otherwise may use a car. However, this needs to be balanced against concerns about the possible negative impact of micromobility vehicles on older or disabled people. There are apprehensions about those riding on the pavement causing problems for these groups, and about the risk of obstruction and littering from poorly parked micromobility vehicles, such as hired electric scooters. Drawing on experience of other cities with dockless hire schemes for electric scooters, there have been discarded electric scooters across pavements and paths as they can be left anywhere. This clearly poses a trip hazard and presents challenges for pedestrians, especially those with visual impairment.

However, as with any new technology, there are potential risks to consider as well. Safety must be a priority. Any vehicle being used on the road presents a risk to the user and to other road users, particularly vulnerable groups such as cyclists and pedestrians. Any regulation must provide suitable protections against these risks. Considerations include whether e-scooters are physically robust and safe by design; whether users have the skills to use them safely; how e-scooters interact with other vehicles, road users and pedestrians; and how liability is handled when collisions occur. These issues must be considered and solutions developed before e-scooters can be safely used in the UK.

⁷ Gov.uk. (2018) Transport and transport technology: public attitudes tracker.

<https://www.gov.uk/government/publications/transport-and-transport-technology-public-attitudes-tracker>.

⁸ Department for Transport. Road Investment Strategy: Overview.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/382808/dft-risoverview.pdf Updated December 2014.

⁹ Gov.uk. British social attitudes survey (ATT03). <https://www.gov.uk/government/statistical-data-sets/att03-attitudesand-behaviour-towards-roads-and-road-travel#congestion-car-driving-and-the-environment> Updated July 2018.

¹⁰ Ajao A. Electric Scooters and Micro-Mobility: Here's Everything You Need to Know.

<https://www.forbes.com/sites/adeyemijao/2019/02/01/everything-you-want-to-know-about-scooters-and-micromobility/#43777d565de6> Updated February 2019.



Response to Transport Committee's Call for Evidence: E-scooters: pavement nuisance or transport innovation?

Where should e-scooters be approved for use?

Lower speed roads

RoSPA believe that electric scooters could be used on lower speed roads. However, we must learn lessons from our European neighbours to ensure that the correct regulatory regime is in place before these vehicles can be safely used.

For example, since the introduction of electric scooter sharing schemes in France in 2018, it has been estimated that 15,000 of them have entered Paris¹¹. The French transport minister stated that the introduction of electric scooters to France "happened very fast" and was "anarchic", resulting in pedestrians being scared to walk on the pavements for fear of getting run over. Some countries, including France, are now changing their legislation to include electric scooter rules. Since October 2019, riders are required to be at least 12. Other rules include riding on the pavement being prohibited unless in designated areas, and then at walking speed only, electric scooters being prohibited on country roads, only one rider being allowed per device and riders not being allowed to wear headphones or use mobile phones. Users cannot ride against the traffic flow and must use cycle lanes where they are available. From July 2020, the scooters' top speed will also be capped at 25km/h, much like an electric bike¹². Similarly, Germany introduced legislation in June 2019 under the small electric vehicle ordinance which stipulated vehicle requirements, who and where they can be used. For example, this introduced a minimum age of 14 for electric scooter use, as well as only permitting them on roads and cycle paths¹³.

In the UK, if e-scooters are to be legalised, they are likely to be used in busy town and city centres, where people take lots of short journeys for work, education and leisure. RoSPA believe that if safety provisions are made, electric scooters may be able to be used on low speed roads, in a similar model to that used for conventional and electrically assisted pedal cycles.

We would not support electric scooters being legalised on higher speed roads. RoSPA are concerned as to whether they are appropriate for use on high-speed rural roads, especially those with lots of bends. RoSPA are concerned that if e-scooters were to be legalised on these roads, in the early stages, there may be 'sorry mate I didn't see you' type collisions with motorists, who may not expect to see these vehicles on their route. Other countries such as France have prohibited the use of electric scooters on such routes. Due to the speed differentiation and visibility issues, we would not wish to see e-scooters permitted on roads with speeds above 30 mph.

¹¹ Snaith E. France to ban electric scooters from pavements after rise in accidents.

<https://www.independent.co.uk/news/world/europe/france-electric-scooter-ban-paris-fine-pavement-elisabeth-bornea8900846.html> Updated May 2019.

¹² BBC. Electric scooters: France introduces new rules to 'restore tranquillity'

<https://www.bbc.co.uk/news/world-europe-50189279> Updated October 2019.

¹³ Bavarian News. Electric scooters: get to know the new regulations.

<https://www.bavariannews.com/blog/2019/07/19/electric-scooters-get-to-know-the-new-regulations/> Updated July 2019.



Response to Transport Committee's Call for Evidence: E-scooters: pavement nuisance or transport innovation?

Cycle lanes

RoSPA believe that with the correct regulatory framework in place, electric scooters should also be permitted to use cycle lanes. Research in Atlanta¹⁴ found that even temporary segregated lanes make people feel safer on a scooter. If legalised for use on cycle lanes, e-scooters should be limited to 20kph. It would be inappropriate for e-scooters to have a faster maximum speed than an e-bike if sharing road space with cyclists.

In October 2019, RoSPA's National Road Safety Committee discussed the use of electric scooters, including where they should be permitted for use. E-scooters were also discussed at the Committee meeting in May 2020 when considering the Future of Transport Regulatory Review; much of this response has come from these two meetings. It is difficult to predict what the impact would be if e-scooters were permitted to use cycle lanes and how e-scooters and cyclists would interact in a confined space. The committee concluded that a number of trials would be beneficial to evaluate the effects of allowing e-scooter use on both cycleways and the road; we are pleased that trials have now been announced. Further research is also required to understand whether allowing micromobility vehicle users on cycle lanes and tracks would discourage cyclists from using these facilities.

If electric scooters were prohibited from cycle paths casualty numbers would be greater and there would be an increased chance of riders using the pavement. This would place pedestrians in danger and have enforcement implications for the police.

In an evaluation of the 2018 electric scooter trial in Portland, Oregon, the Portland Bureau of Transportation found that 83% of e-scooter related injuries were 'minor', but 13% of these resulted from a collision with a motor vehicle. Streets with cycle lanes had the highest levels of electric scooter usage, with riders using the pavement less when the roads had cycle lanes¹⁵.

Currently, the implications of allowing electric scooters to use cycle lanes and tracks are unknown. A rapid increase in the number of these vehicles may result in too many vehicles using these facilities, leading to conflict between users vying for limited space. This may have a negative effect in making the current cycle provision less appealing.

Pavements

RoSPA would not support a law change to allow e-scooters or any other micromobility vehicles on the pavement, beyond the current mobility scooters and pedestrian operated street cleaning vehicles. To impose a maximum

¹⁴ Atlanta Curbed. How Midtown's pop-up bike lane could inform the future of Atlanta mobility
<https://atlanta.curbed.com/2020/1/31/21116662/midtown-atlanta-pop-up-bike-lane-study> Updated January 2020.

¹⁵ Taur. Why riding electric scooters in bike lanes makes us all safer.
<https://www.taur.com/post/riding-electric-scooters-in-bike-lanes-makes-us-all-safer>



Response to Transport Committee's Call for Evidence: E-scooters: pavement nuisance or transport innovation?

speed limit for pavement use on an e-scooter as is the case for a class 2 mobility scooter would be impractical and difficult to enforce.

Permitting e-scooters on pavements or in pedestrian areas would deter people from walking, from fear that they may become involved in a collision, thus negating any active travel benefits. A relaxation of the current legislation would affect pedestrians using the pavement, in particular, those with visual impairments, hearing impairments and mobility problems, who rely on the pavement being clear.

The use of safety equipment

As is the case for cyclists, RoSPA would not call for the mandatory use of safety equipment, such as helmets, by electric scooter users. This is because it is not clear whether such a law would discourage some people from using electric scooters, which, if it did, would mean losing the environmental benefits of this form of transport.

RoSPA's position is that we strongly recommend that electric scooter riders wear a helmet. However, it is important to remember that helmets do not prevent crashes from happening. It is therefore vital that through infrastructure improvements, supported by education and training that we reduce the primary risk factors.

If e-scooters are used at night RoSPA believes that they must have a working lights. There might also be cause to consider the compulsory wearing of a high visibility garment.

Safety and environmental regulations

All vehicles used on the road must be safe. RoSPA believe that the UK should look to European colleagues for an understanding of what the minimum safety standards for micromobility vehicles should be. A regulatory framework similar to Germany would seem a sensible approach¹⁶.

RoSPA is not an expert on e-scooter design, but would like to see as a minimum safety specification:

- Maximum speed 20 km/h
- Maximum continuous rated motor power of 250 w
- Minimum wheel size of 200mm (8")
- Maximum weight of 25kg
- Brakes to be fitted on both front and rear wheels.
- At least one braking system to be independent of the vehicle's electrical system
- Braking levers arranged with the front brake(s) operated by the right hand

¹⁶ Elitis. E-scooter regulations in Germany and France.

<https://www.elitis.org/discover/news/e-scooter-regulations-germany-and-france> Updated June 2019.



Response to Transport Committee's Call for Evidence: E-scooters: pavement nuisance or transport innovation?

- Brakes to be in "efficient working order" for legal use
- Mandatory reflectors front, rear, side
- Lights required when used at night only.

RoSPA has no further comments to make on the consultation process, other than to thank the Transport Committee for the opportunity to comment. We have no objection to our response being reproduced or attributed.

