



accidents don't have to happen

E-scooters: follow up

RoSPA's response to Transport Select Committee's call for evidence

February 2023



Response to Transport Select Committee's call for evidence: E-scooters: follow up

Introduction

This is the response of The Royal Society for the Prevention of Accidents (RoSPA) to the Transport Select Committee's call for evidence on e-scooters. It has been produced following consultation with RoSPA's National Road Safety Committee. We have no objection to our response being reproduced or attributed.

The consultation seeks views on findings from the ongoing e-scooter trials and the progress that has been made in assessing their safety, impact on congestion and the experience of pedestrians.



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Trial scheme data

E-scooters are becoming more popular around the world, as people seek alternatives to travelling by car to reduce carbon emissions, have better mobility around congested cities and save money.

E-scooter rental trials are running in some areas in the UK, in which riders over the age of 16 who have a full or provisional driving licence can hire e-scooters for use on the road. The first trial started in July 2020 and a total of 32 trials across 55 areas have been implemented. By the end of December 2021, 31 trials remained in operation across 50 areas, delivered by a total of 12 e-scooter operators¹. In areas not covered by one of the trials, e-scooters can only be ridden on private land with the landowner's permission.

The Department for Transport commissioned study² on e-scooter trials showed that at the national level, 14.5 million e-scooter trips were made between July 2020 and December 2021. During this period, the average e-scooter trial trip length was 2.2km and took 14 minutes. This suggests that e-scooters act as a mode of transport in between walking and cycling in terms of average distance.

One of the concerns about the use of e-scooters is the potential for a move away from active travel, given the time savings that an individual can make when making a journey by e-scooter versus walking. In December 2021, as part of the Department for Transport commissioned report³, 42% of users reported that they would have walked if they had not taken an e-scooter on their last trip. 21% of users reported that they would have travelled by private transport (car, van or taxi), 18% would have travelled by public transport (bus, train, tube or tram), 10% would have cycled, and nine per cent would not have made the journey at all.

Despite what seems to be a concerning trend in individuals replacing walking trips with e-scooter journeys, this trend did decline with the mode shift from walking falling by seven per cent between March 2021 and December 2021. In the same period, a mode shift from use of private vehicles to e-scooters increased by nine per cent. As the report⁴ states, with over half of trial e-scooter journeys replacing walking and cycling trips, their use may have led to a reduction in physical exercise, and a consequent negative health impact. However, by creating new journeys and encouraging a move away from private vehicles for some trips, e-scooters may have also led to

¹ Arup and NatCen (2022) 'National evaluation of e-scooter trials'

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128454/national-evaluation-of-e-scooter-trials-findings-report.pdf

² Arup and NatCen (2022) 'National evaluation of e-scooter trials'

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128454/national-evaluation-of-e-scooter-trials-findings-report.pdf

³ Arup and NatCen (2022) 'National evaluation of e-scooter trials'

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128454/national-evaluation-of-e-scooter-trials-findings-report.pdf

⁴ Arup and NatCen (2022) 'National evaluation of e-scooter trials'

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some positive impacts including related to mental health. For users who took part in an in-depth interview, time and cost savings, convenience and enjoyment motivated them to use an e-scooter.

In terms of demographic data⁵, the Department commissioned report showed that e-scooter users were predominantly male and aged under 35. This group were also more likely to rent an e-scooter frequently. Those from ethnic minority groups and those on low incomes were also more likely to frequently hire a scooter.

The purpose of trips is also important. From March to December 2021, the proportion of trips that formed part of the commute increased from 24% to 33%. Given that these e-scooters are a new form of transport, there was an element of novelty that attracted users, particularly at the beginning of the trials. From March 2021 to December 2021, the proportion of trips taken for leisure or enjoyment fell from 12% to seven per cent.

⁵ Arup and NatCen (2022) 'National evaluation of e-scooter trials'

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128454/national-evaluation-of-e-scooter-trials-findings-report.pdf



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Safety

As is the case with all forms of transport, travelling by e-scooter does come with some element of risk. E-scooter users are considered to be one of the vulnerable user groups. They are not protected by a vehicle body in the same way car users are and tend to be harder for drivers to see on the road. They are, therefore, particularly susceptible to injuries.

As part of the Reported Road Casualties Great Britain publication, the Department for Transport published a factsheet⁶ on e-scooter injuries in 2022. The factsheet shows that in 2021, there were 1,352 collisions involving e-scooters on Great Britain's roads. In these collisions, 10 people were killed and 421 people were seriously injured. In just under a quarter of these collisions, the e-scooter was the only vehicle involved.

There were 1,434 casualties in total. Over 75% of those injured in collisions involving an e-scooter, were the rider themselves. Based on analysis of STATS19 data of rental e-scooters undertaken by DfT, a provisional rate was estimated of 13 casualties per million miles, about three times higher than the rate for pedal cycles⁷.

The data also shows the type of injuries most commonly sustained in collisions involving e-scooters. The top three most common injuries were those of a 'slight' nature, including shallow cuts, lacerations and abrasions, bruising and sprains and strains. However, the fourth, fifth and sixth most common type of injuries are different type of fractures and head injuries which are considered as serious injuries.

The report commissioned by the Department for Transport also offers an insight into collisions and safety. According to the user survey, five per cent of e-scooter riders had experienced a collision in the last 12 months. Less experienced users reported the majority of e-scooter collisions. For the most part, these did not involve other road users (i.e. were single vehicle collisions) with the main contributing factor reported by users being rider error. This suggests that more experience and training, particularly for new users, could help improve rental e-scooter safety.

According to the survey, 63% of collisions had led to injury, but this was often of a minor nature. 47% of those injuries included cuts and bruises. 70% of users who had experienced an injury did not seek medical attention, but 15% had been injured seriously enough to attend A&E.

⁶ Department for Transport (2022) 'Reported road casualties Great Britain: e-Scooter factsheet 2021'

<https://www.gov.uk/government/statistics/reported-road-casualties-great-britain-e-scooter-factsheet-2021/reported-road-casualties-great-britain-e-scooter-factsheet-2021>

⁷ Arup and NatCen (2022) 'National evaluation of e-scooter trials'

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128454/national-evaluation-of-e-scooter-trials-findings-report.pdf



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Solutions

In countries where e-scooters are already used widely, various approaches are being taken to address safety, including encouraging users to ride e-scooters safely and wear a helmet, introducing a minimum age for users and restricting the use of e-scooters to cycle lanes and roads.

The safety of all road user groups is in no small part dictated by infrastructure and environment. RoSPA urges that we continue, at pace, with creating safe, segregated spaces for vulnerable road users, including e-scooter riders.

In the UK, RoSPA advocates that e-scooter providers and local authorities involved in the rental trials should implement robust systems that swiftly identify when accidents and incidents have occurred. This is important to enable any issues, such as damaged or misplaced e-scooters, to be rectified quickly, and will also contribute to our collective understanding of e-scooter usage and incidents.

Providers and councils also need to recognise and minimise the opportunity for e-scooter users to misuse and ignore practical standards in the current trials. Good discipline by riders now will create a culture of good user behaviour in the future, and training opportunities for e-scooter riders are an important part of this, along with an encouragement that riders wear helmets. We believe that the roll out of e-scooters should be matched by rigorous user education. Voluntary training schemes should be readily available to all riders and we would strongly recommend that all users take part in some form of safety training.

Geofencing (putting a virtual perimeter around a real-world location) and identifying and preventing pavement riding are absolutely critical in the trials, to ensure that e-scooters are used and parked in a safe and responsible way. Trial operators must ensure that accurate plans and routes are created and implemented consistently for e-scooters, paying particular attention to low-speed zones and exclusion areas.

Parking is an issue that also merits serious consideration. Parking and access were reported as key issues for residents and local stakeholders throughout the Department for Transport commissioned evaluation. According to the resident survey, 44% of respondents had experienced a parked e-scooter blocking their access to the pavement, and 45% agreed that parked e-scooters get in the way of pedestrians. Poor parking of e-scooters can cause nuisance to all pavement users, but presents particular challenges for those with mobility problems and visual impairments. Although a picture is now developing of how the hire scooter schemes impact on street clutter, it is unclear whether this would be reflected with private scooters, if they were to be legalised.

All vehicles used on the road must be safe. RoSPA believes that the UK should look to European colleagues for an understanding of what the minimum safety standards for micromobility vehicles should be.

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.



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- 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
- Brakes to be in "efficient working order" for legal use
- Mandatory reflectors front, rear, side

Although more must be done to ensure that safety training, minimum safety standards, consideration for interaction with other road users and suitable infrastructure is in place, RoSPA urges the Government to consider how privately owned e-scooters could eventually be legislated and safely used on Great Britain's roads, given that Britain's press estimated that in 2022, between 750,000 and one million privately owned e-scooters were being used, in the majority of cases, illegally, in Great Britain^{8,9}.

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

⁸ The Guardian (2022) "I know they're exciting – but calm down!" Britain's love-hate affair with the e-scooter'

<https://www.theguardian.com/uk-news/2022/apr/27/i-know-theyre-exciting-but-calm-down-britains-love-hate-affair-with-the-e-scooter>

⁹ Daily Mail (2022) 'More than a MILLION e-scooters are on UK roads... with the vast majority being ridden ILLEGALLY'

<https://www.dailymail.co.uk/news/article-10508417/More-MILLION-e-scooters-UK-roads-vast-majority-ridden-ILLEGALLY.html>

