



Electric scooters: policy, regulation and safety

Number 29, 2019

Part of the [Tranzinfo Hot Topics](#) series, this issue offers a selection of material on the policy, regulation and safety issues surrounding electric scooters, also known as e-scooters. An e-scooter has the same features as a traditional push/kick foot scooter but can be propelled by an electric motor.

Whether privately-owned or part of dockless, shared schemes such as Bird or Lime, e-scooters are an increasingly common sight in major cities. They are seen as an environmentally-friendly, low-cost form of active travel that can help to ease traffic congestion and provide a first/last leg transport solution for commuters. However, their rapid rise in popularity is causing headaches for regulators, mainly due to safety concerns.

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[The great debate around e-scooters](#)

ARRB, 11 December 2018

An overview of the rise of e-scooters and the pros and cons of their adoption.

[Australia's electric scooter laws by state](#)

Budget Direct, 16 May 2019

Electric scooter laws in Australia vary from state to state. In some states and territories, users can ride an electric scooter at up to 25km/h, while in other states, electric scooters can only be used on private property.

[Limes not lemons: lessons from Australia's first e-scooter sharing trial](#)

The Conversation, 23 January 2019

Transport researchers from Griffith University offer some observations on Brisbane's trial of Lime e-scooters.

[Darwin hopes e-scooters will boost economy](#)

Government News, 19 April 2019

The City of Darwin has launched a 12-month trial of smart e-scooters that will access data from user profiles such as travel patterns.

[Electric scooter shared services discussion paper](#)

WALGA, 2019

The purpose of this paper is to inform the Local Government sector on the issues involved with the implementation of e-scooter shared services. This discussion paper identifies the issues and learnings of existing e-scooter shared services, and the policy implications relevant to WA Local Governments.

[Regulating the use of electric personal transportation devices \(electric scooters and similar devices\) in the ACT: discussion paper ACT Govt discussion paper](#)

ACT Government, June 2019

The ACT Government intends to amend the territory's road transports laws to allow electric scooters (e-scooters) and similar personal mobility devices to travel legally in the nation's capital.

[Banning 'tiny vehicles' would deny us smarter ways to get around our cities](#)

Hussein Dia, The Conversation, 3 April 2019

The exploding popularity of e-scooters could reshape mobility in our cities. Regulators need to adapt their approaches to handle the innovation rather than ban it altogether.

[Why e-scooters a victim of their own success and what they're doing about it](#)

The Fifth Estate, 1 July 2019

The rise of e-scooter use in the past 18 months has led to a backlash, with many cities banning them or curtailing their use. E-scooter companies are now fighting back, adopting measures such as hiring PR firms.

[Department for Transport asks stakeholders today whether U.K. should legalize e-scooters](#)

Forbes, 15 July 2019

The U.K.'s Department for Transport (DfT) is meeting with stakeholders to gauge views on whether e-scooters should be legalized for use in Britain. It is believed that the DfT is under increasing commercial pressure to allow e-scooters to become legal for use on roads and cycleways.

[Shareable scooters may seem sustainable, but are they really?](#)

GreenBiz, 16 July 2019

There is growing concern about the sustainability claims of shared e-scooters.

[Shared e-scooters aren't always as green as other transport options](#)

Johnson, J & Shipman, M, NC State University, August 2019

A new study from North Carolina State University finds that shared e-scooters may be greener than most cars, but they can be less green than several other options.

[How and where should I ride this thing? "Rules of the road" for personal transportation devices](#)

Fang, K, et al., Mineta Transportation Institute, San Jose, CA, USA, 2019, 93 pp. To help local officials identify appropriate rules for rider behaviour, this report documents and analyses existing personal transportation device (PTD) regulations across 176 jurisdictions and then presents recommendations for a set of state-level "rules of the road" designed to balance safety and freedom of movement for all road users, including PTD riders.

[Shared micromobility policy toolkit: docked and dockless bike and scooter sharing](#)

Shaheen, S & Cohen, A, University of California, Berkeley, 2019, 33p

Shared micromobility includes various service models and transportation modes, such as station-based bikesharing (a bicycle picked-up from and returned to any station or kiosk) and dockless bikesharing and scooter sharing (a bicycle or scooter picked up and returned to any location). Early documented impacts of shared micromobility include increased mobility, reduced greenhouse gas emissions, decreased automobile use, economic development, and health benefits.

[2018 E-scooter findings report](#)

Portland Bureau of Transportation, USA, 2019, 36p

The city of Portland, Oregon conducted an E-Scooter pilot program from July 23 through November 20, 2018. Designed to assess whether – and how – e-scooters could help meet Portland's transportation needs, the pilot featured a permitting framework that aligned e-scooter company business practices with four critical City of Portland objectives: (1) Reduce traffic congestion by shifting trips away from private motor vehicle use; (2) Prevent fatalities and serious injuries on Portland streets; (3) Expand access to opportunities for underserved Portlanders; and (4) Reduce air pollution, including climate pollution.

[Governing micro-mobility: a nationwide assessment of electric scooter regulations.](#)

Anderson-Hall, K et al., Transportation Research Board 98th Annual Meeting, 2019, 18p

This paper draws from contemporary news articles, municipal and statewide policies and professional reports to provide timely guidance related to e-scooter sharing programs including information about vendors, vehicles, programs and novel regulatory responses.

[The Micro-Mobility revolution: the introduction and adoption of electric scooters in the United States.](#)

Clellow, R., Transportation Research Board 98th Annual Meeting, Transportation Research Board, 2019, 13p

The goal of this paper is to share new findings on the adoption, utilization, and impacts of private mobility services. This study presents new data and findings on the adoption and early perceptions of shared electric scooters (e-scooters), which experienced a rapid rate of private investment, funding significant service launches in cities across the United States in 2017 and 2018.

[E-Scooter scenarios: evaluating the potential mobility benefits of shared dockless scooters in Chicago](#)

Smith, C & Schwieterman, J, DePaul University, 2018, 32p

This study examines the potential for public e-scooter sharing systems to fill mobility needs within and between Chicago neighbourhoods. It explores how availability of this micro-mode of transportation could influence travel time, cost, and the convenience of trips relative to other active and shared-use modes including walking, bicycling, bikeshare, and public transit.

[Innovative active travel solutions and their evaluation](#)

Ognissanto, F., et al., TRL Limited, 2018, 114p

This report reviews recent innovations in active travel modes and evaluates techniques for exploring their health benefits. As well as cycling, skateboarding and scooters, the review covers electrically assisted vehicles such as electric bicycles (e-bikes), powered scooters, electric skateboards, hoverboards and Segways, known as Personal Light Electric Vehicles (PLEVs).

[Where do riders park dockless, shared electric scooters? Findings from San Jose, California.](#)

Fang, K. et al., Mineta Transportation Institute, 2018, 5p

This study explores the extent to which parked shared scooters pose a problem to others on streets, sidewalks, and public spaces, using empirical evidence documenting where scooters have been parked in downtown San Jose, California. Summarises the study methods, key findings, and suggested implications for policymakers.

[Time to embrace scooters, Segways and hoverboards?](#)

Spear, J., Atkins Global, 2017

Singapore is soon set to approve the use of Personal Mobility Devices such as electric scooters and hoverboards on foot and cycle paths. Could other cities follow suit or are such devices a passing fad?

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Safety issues

[Study finds nearly half of shared e-scooters being ridden illegally](#)

Queensland University of Technology, 11 July 2019

Nearly half of shared e-scooters in central Brisbane are being ridden illegally, according to an observational study by Queensland University of Technology researchers.

[Brisbane scooter riders fined for hundreds of safety breaches in Queensland](#)

ABC News, 30 March 2019

Hundreds of people have been fined with safety breaches using electric scooters since they were introduced in Brisbane last year, with the majority of riders caught without a helmet.

[Lime scooters braking fault sees company threatened with removal from Auckland streets](#)

ABC News, 21 February 2019

Auckland Transport has warned that it may halt the operations of dockless scooter-sharing scheme Lime due to safety concerns.

[NTC to investigate barriers to the safe use of innovative vehicles and motorised mobility devices](#)

National Transport Commission, 10 January 2019

The National Transport Commission (NTC) is investigating regulatory reform to allow the safe and legal use of innovative vehicles and motorised mobility devices such as electric scooters, skateboards and unicycles on public roads and footpaths, and has released an [issues paper](#) for public comment.

[New ad campaign to encourage safe e-scooting](#)

NZ Transport Agency media release, 5 June 2019

The NZ Transport Agency has launched a new campaign to encourage the safe use of e-scooters, with a focus on safe speeds, giving way to other footpath users, and wearing helmets.

[Why electric scooter companies are getting serious about safety](#)

CityLab, USA, 16 July 2019

Shared e-scooter companies Lime and Bird have established safety advisory boards to conduct research and advise on safety and regulatory issues, in a bid to shake the risky reputation that e-scooters have gained in recent times.

[Invasion of the electric scooter: can our cities cope?](#)

The Guardian, 15 July 2019

Safety concerns are driving a backlash against electric scooters in some cities.

[Helmet churn adds to challenges of e-scooter disruption](#)

The Conversation, 4 April 2019

The introduction of e-scooters has raised a number of safety and regulatory issues, including the importance of helmets.

[Regulations and safety for electric bicycles and other low-powered vehicles](#)

Lieswyn, J et al., NZ Transport Agency research report no. 621, 2017

A review of overseas legislation, technology trends, market and safety analyses for low-powered, low-speed vehicles. These vehicles include electric bicycles, mobility scooters, self-balancing devices and other personal mobility or wheeled recreational devices. The report assesses various regulatory and non-regulatory options for improving safety while supporting technological innovation and mode choice options in New Zealand.

[Dockless electric scooter-related injuries study](#)

City of Austin, Texas, USA, 2019, 15p

The report includes information such as age group, residence, riding experience, injury type, injury severity, location, and crash characteristics. Almost half of the injured riders had a severe injury and almost half sustained a head injury. Only one of the 190 riders was wearing a helmet. More than one-third of injured riders reported that excessive e-scooter speed was a contributing factor.

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