

SUSTAINABLE TRAVEL

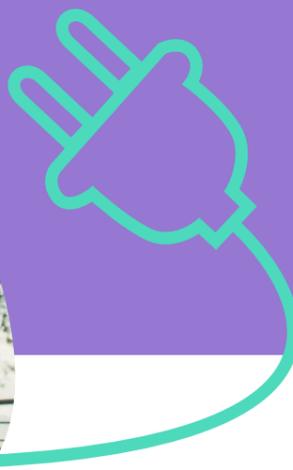
THE SHIFTING TERRAIN OF URBAN MOBILITY



Re  **set**

**lessons from
lockdown**

THE SHIFTING TERRAIN OF URBAN MOBILITY



The pandemic has fundamentally changed the way we move around cities, but micromobility is set to play a starring role as cities open up once more



KEEP YOUR DISTANCE



From travel restrictions and border closures, to the pedestrianisation of roads and the creation of pop-up cycle lanes, our mobility has been forever changed by COVID-19 and the lockdowns it triggered. The way in which people move around had to change in order to limit the spread of the virus and keep themselves, and their loved ones, safe.

There was a switch between different forms of low-carbon mobility, for example, from public transport to walking and cycling, but the pandemic coincided too with the arrival of electric micro-mobility – the new scooter and bike kids on the block. Now, evidence is beginning to percolate through that these new arrivals – apart from being flexible and clean ways of getting around – are also boosting local businesses and cultural attractions, as well as increasing access to jobs and opportunities.

These shifts in mobility create some problems, but also new opportunities and fresh questions. **Although recent scientific evidence suggests that virus transmission on public transport was in fact low,¹** the pandemic saw a big drop in people using trams, trains and buses in response to official advice on social distancing. In many places public transport faces a challenge to make up for income lost due to the drop in passenger numbers, so it can provide the services necessary to deliver emissions cuts in cities around the globe.



“The pandemic forced people away from public transport and disrupted their daily commutes. This opened many people up to new experiences and some were willing to try newer mobility options, like e-scooters. The convenience and cost of an electric scooter is unparalleled – especially amid the sky-high fuel prices and expected increases in rail and bus fares. If we are serious about getting cars off the roads and tackling air pollution, we need to lean into the convenience and value that micro-mobility options can provide as genuine low carbon transport options.”

Stewart Montgomery, owner of The scooter.shop

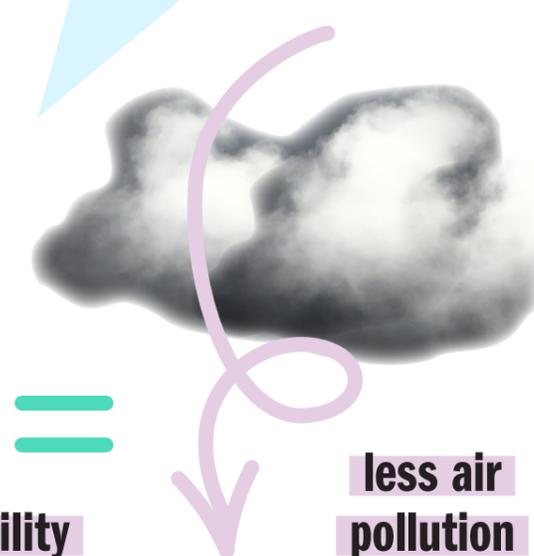
But, as authorities work out not just how to restore, but build the fortunes of public, mass transit systems, other modes of transport are becoming available to get people around cheaply, safely and sustainably. Electric mobility or e-mobility is filling a gap, tapping unmet demand and increasing the range of car-free choices for getting around. This is the use of electric vehicles, such as cars and vans, but also micro-mobility options like e-bicycles, e-scooters and bike sharing platforms. Basically, anything with wheels that is powered by electricity.

The pandemic bit just as the electric micro-mobility industry was beginning to accelerate. At the rates of growth forecast in 2019, the micro-mobility industry was set to be **worth between \$300 and \$500 billion by 2030.**² But, like most sectors of the economy, it took a major hit at the onset of the global pandemic, with ridership falling by 60-70 per cent. Despite this set back, e-scooters and e-bikes are set for a strong post-pandemic recovery because of the benefits they offer commuters and more casual users, **as well as winning over the new users that tried micro-mobility for the first time during the pandemic.**³



walking and pedal power cycling

micro-mobility



less air pollution

A report from the **North American Bikeshare and Scootershare Association (NABSA)**⁴ found that approximately half of the shared micro-mobility systems surveyed saw increases in their first time riders during the pandemic. This was strongest among bike sharing platforms: in 2019 North American bike sharing platforms aided **seven million trips in 2019.**⁵ During the pandemic, this had risen to **ten million trips**⁶ as these mobility options continued to provide services in the face of public transport closures. In particular, essential and frontline workers made extensive use of shared micro-mobility options – and many mobility providers in cities such as **Washington D.C. and New York**⁷ sought to help fill the gaps left by public transport closures.

While there is sometimes concern that micro-mobility could substitute for other low carbon forms of transport, such as walking and pedal powered cycling, evidence suggests that it is well placed to help rid cities of cars. Estimates vary according to the specific geography of cities, but **one pilot in Munich found that micro-mobility could save an estimated 80,000 tons of car-based CO2 emissions compared with today.**⁸ This is equivalent to the annual CO2 emissions of about **10,000 to 15,000 German citizens.**⁹ In addition to the emissions savings, there would also be a significant drop in air pollution, **which was responsible for 1.8 million deaths in cities around the world in 2019.**¹⁰



“One of the few genuine positives to come out of the pandemic is the way it has forced people out of their ingrained travel habits – most obviously in the case of work meetings over zoom, a shift that’s expected to permanently alter travel patterns with big benefits for the climate. The boom in micro-mobility and first time users of shared cycle hire schemes could prove just as significant because of its potential to permanently change habitual behaviours people undertake every day. Evidence shows that the hardest aspect of achieving behaviour change is taking the first step and just trying something new and unfamiliar, so one of the most effective interventions is to give people the opportunity and the impetus to do that – which the last two years has provided.”

Leo Murray, director of innovation at Possible

As urban economies begin to recover from the damage wrought by the pandemic, micro-mobility services can play a decisive role in improving commute times for those that are employed and in helping those that are not employed to access a greater number of employment opportunities. A study conducted by Micromobility Coalition and DePaul University found that when paired with walking and transit, micro-mobility provided access to **44 per cent more jobs within a commute of 45 minutes or less.**¹¹ In the city of Boston, micro-mobility services – alongside walking and transit – **allowed people to access 60 per cent more employment opportunities.**¹²

Micro-mobility can also help support local businesses and cultural attractions, which were decimated by the pandemic. A study by scooter-sharing platform, Lime, **found that 72 per cent of e-scooter riders used them to visit local shops and attractions.**¹³ Another study, from Emory University, found that shared mobility schemes helped increase sales for food and beverage shops, **contributing an extra \$13.8 million to the local economy.**¹⁴ Combining micro-mobility projects with the broader push to pedestrianise large swathes of urban areas can help foster flourishing and vibrant local economies.

Both cities and investors are eyeing up micro-mobility as a way of driving down emissions and air pollution as the world emerges from the global pandemic. Last year was a record breaking year for investment in mobility startups throughout Europe, **with €2.2 billion raised.**¹⁵ Across China, Europe and the USA, the shared mobility market is **worth an estimated \$60 billion.**¹⁶ Both in spite of the pandemic, and because of it, electric micro-mobility is set to play an important role in the modal mix for ways of getting around urban centres as cities try to balance decarbonisation, air pollution and opportunity.

REFERENCES

1. Scientific American

<https://www.scientificamerican.com/article/there-is-little-evidence-that-mass-transit-poses-a-risk-of-coronavirus-outbreaks/>

2. Mckinsey & Company

<https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/micromobilitys-15000-mile-checkup>

3. Climateworks Foundation

<https://www.climateworks.org/blog/the-pandemic-showed-why-micromobility-is-crucial-to-urban-resilience-mitigation-and-adaptation/>

4. NABSA

<https://nabsa.net/about/industry/>

5. Climateworks Foundation

<https://www.climateworks.org/blog/the-pandemic-showed-why-micromobility-is-crucial-to-urban-resilience-mitigation-and-adaptation/>

6. Climateworks Foundation

<https://www.climateworks.org/blog/the-pandemic-showed-why-micromobility-is-crucial-to-urban-resilience-mitigation-and-adaptation/>

7. TechRepublic

<https://www.techrepublic.com/article/mobility-companies-pivot-to-helping-critical-workers-as-everyone-else-stays-at-home/>

8. Mckinsey & Company

<https://www.mckinsey.com/-/media/McKinsey/Industries/Automotive%20and%20Assembly/Our%20Insights/Micromobility%20industry%20progress%20and%20a%20closer%20look%20at%20the%20case%20of%20Munich/Micromobility-industry-progress-and-a-closer-look-vf2.pdf>

9. Mckinsey & Company

<https://www.mckinsey.com/-/media/McKinsey/Industries/Automotive%20and%20Assembly/Our%20Insights/Micromobility%20industry%20progress%20and%20a%20closer%20look%20at%20the%20case%20of%20Munich/Micromobility-industry-progress-and-a-closer-look-vf2.pdf>

10. The Independent

<https://www.independent.co.uk/climate-change/news/air-pollution-global-deaths-cities-b1987396.html>

11. NABSA

<https://nabsa.net/about/industry/>

12. Climateworks Foundation

<https://www.climateworks.org/blog/the-pandemic-showed-why-micromobility-is-crucial-to-urban-resilience-mitigation-and-adaptation/>

13. Eltis

<https://www.eltis.org/in-brief/news/benefits-micro-mobility-cities>

14. Eltis

<https://www.eltis.org/in-brief/news/benefits-micro-mobility-cities>

15. Sifted

<https://sifted.eu/articles/mobility-startups/>

16. Mckinsey & Company

<https://www.mckinsey.com/features/mckinsey-center-for-future-mobility/overview/shared-mobility>

Re→set

lessons from lockdown

This guide has been made possible by the support of ClimateWorks Foundation – climateworks.org – and is published by the Rapid Transition Alliance – rapidtransition.org – where you can find many of these examples explored in more detail.

rapidtransition.org

[@RapidTransition](https://twitter.com/RapidTransition)