

Are we ready for future mobility?

There's no doubt we are living through a period of unprecedented change in the transport systems we use. Time to assess what's already in place and how user-friendly it's proving. To do this, we will be despatching Neil Barrett and his electric car to a number of cities over the course of 2022. His journey of discovery begins in Oxford...

This decade is likely to witness some of the biggest changes in how we get from A to B. Alongside the move to phase out petrol and diesel from propelling our cars, there's a huge shift to active mobility, with investment in pedestrianisation and cycling infrastructure and local authorities supporting the introduction of relatively new forms of transport... such as e-bikes and e-scooters for hire with apps.

There's also the siting of multi-modal hubs, the prevalence of app-based ride-hailing and the move to low – or in some cases, zero – emission zones. Nowhere will feel the effects of these changes more than our city centres. The question is: are they ready? On a cold, bright Sunday morning, I headed into the city centre. An early draft of my plan was to drive to a 'Park and Ride' facility and hop on a bus into the centre of Oxford. The Redbridge Park and Ride will soon be the ideal choice for this, as it'll be the site of the UK's largest EV charging hub,

according to the developers. It is a huge project, with 38 chargers, café, solar panels and a direct connection to the National Grid. It wasn't going to be finished when I visited, so the logical choice was to park closer to the action.



Oxford is planning a bold move when it comes to city centre emissions, with its Zero Emission Zone (ZEZ). By the time you read this, a small ZEZ pilot should be up and running.

The plan is that by August 2025 a large area of Oxford city centre will be pay-to-drive between 7am and 7pm every day, for almost any vehicle with emissions.

The initial charges will be £2, £4 or £10 per day depending on the type of vehicle; these charges are expected to double when the wider rollout happens.

It also seems to be well thought through. For example, EV exemptions from the charge will be handled by automatic number plate recognition

“
EV exemptions from the charge will be handled by automatic numberplate recognition without the need for registration.
”

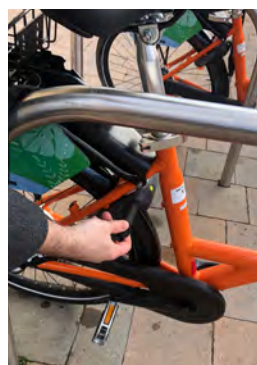


Pics: Amelia Barrett

without the need for registration - unlike with London's congestion charge where an annual process and fee is necessary. Also, the London EV discount ends in 2025.

My car park of choice was inside the Westgate shopping centre. It boasts no fewer than 50 EV charging points, with free charging on a "bring your own cable" basis. Parking charges are in line with what you would expect from a city's shopping centre (in other words not cheap).

I arrived long before the shops opened, so I had the pick of the EV spaces. I parked up, plugged in and headed off on foot to the next part of the day's research. On the way, I noticed e-taxi charging places, with dedicated facilities for local cabs. On that note, the universal ride-hailing apps have not fully landed here yet. If you open Uber in Oxford - which happens 65,000 times per month according to their figures - it helps you book a cab with a local firm. The ride-hailing giant itself doesn't have its own network of drivers here but its pseudo-presence has upset many in the



cab trade. It does, however, make things more convenient for those who travel to many towns and cities and, for practical reasons, make use of widely supported apps instead of having to set up a taxi app for each place.

SUNDAY SCOOTING

E-scooters are being piloted in a range of urban locations across England. The controlled pilots of legal, app-based e-scooter hire are strict, with a driving licence and identity check needed, plus points on that licence for offences. There are technologically-enforced speed limits, slow zones and strict parking controls.

Oxford has gone large with this pilot, for which they have chosen Voi to provide the tech. In the city centre I was always no more than a few minutes' walk away from a bundle of bright orange e-scooters in their marked bays. Having pre-registered for the Voi app to avoid the fiddly admin, it was essentially just a case of popping >>

FAST FORWARD

>> the helmet on and scanning the QR code on the scooter. Off I went!

I chose a straightforward loop which included a bend, zebra crossing, bus stop and fairly steep gradient. It was a flawless ride and, to be honest, it put a smile on my face.

ON THEIR BIKE

Bicycles next - and again, Oxford is good to go when it comes to “hop on, hop off” bike hire. Donkey Republic is a main provider here, offering app-based rental on a pay-as-you-go basis. The bikes are dockless (unlike, for example, the main London scheme) but the ones I saw were in safe, non-obstructive locations.

Hiring and returning a bike was easy. On the road I was using, there was a painted cycle lane but no physical segregation. There are plans for cycle quickways and quietways, so these should make more roads safer for active travel.

I couldn't see any available electric bikes – an online check suggests Donkey Republic is piloting these in some places around the world.

Bike testing done, I decided to pick another e-scooter at random. Unfortunately, it unlocked but then wouldn't go anywhere. There was no indication of a low battery or being in a no-go zone. A minor inconvenience.

After that it was time for a little coffee break. I was impressed with things so far. This is where the second, bigger, blip in proceedings happened.

STOPPED MID-FLOW

An alert on my phone from the car's app: 'charging interrupted'. What was it? A power problem? A connection issue? Someone forced the cable out of the charging port... or worse? I walked back to the car in the underground car park to see what was happening to the car. I sat down inside to see how the restarted effort was going. The estimated remaining time was bouncing wildly – between five and '24+' hours. It seemed like there were some massive fluctuations in the amount of power being squeezed through the cable. By now the shops were open and most EV bays were full, so maybe demand was exceeding supply. Eventually it settled on an estimate which was around what I was expecting. So, away I went, with fingers crossed.

My third attempt at e-scooting, in a different part of the city, went well, with a quick unlocking process, a nice efficient ride and easy 'virtual docking' in the dotted line e-scooter parking box.

Unfortunately, the car stopped charging again, so back to the starting point I went. This time, it was terminal. The lights had gone out on my charging box and, interestingly, on a whole group of them. A large collection of EVs were not charging at all. It looked like the situation wasn't going to change in the short term, so it was time to move on.

I had already looked into charging availability

“

On the road I was using there was a painted cycle lane but no physical segregation.

”



elsewhere in the city. One of the main providers of local charging points went into administration late in 2021 and there is a new owner of those assets. There is also lamp post-based on-street charging, which I was planning to try. However, all three locations that I visited were occupied.

By that time I'd had enough of the hunt, so I headed to the motorway service station to use the tried and tested rapid chargers – and then home. ■

Neil's summary and score out of 100:



EV charging aside – and there are ambitious plans to do something about this – Oxford is making big strides and can boast some solid achievements already, when it comes to embracing the future of mobility. Overall: we reckon it's a city heading in the right direction.

Online information to help plan journeys	7
EV charger convenience (location, number and reliability)	6
App-based ride hailing	5
App-based bike provision	9
App-based e-scooter provision	10
App-based e-bike provision	0
Cycle/scooter infrastructure (e.g. dedicated lanes)	6
Low/zero emission zone or clean air zone	10
Connected mobility (Park & Ride, transport hubs)	7
Walking routes / pedestrianisation	6
TOTAL SCORE:	66