

# Lime in Camden

Culture and Environment Scrutiny Committee follow up session



# Overview

Following the previous Committee session (May 2023) Lime has worked with Camden Council to successfully launch Phase 2 of our shared e-bike service.

- To date we have delivered:
  - **Over 1 million rides in only 5 months (up 70,000 per month on Phase 1)**
  - **An average of more than 60,000 monthly riders (up 20,000 on Phase 1)**
  - **Latest parking compliance of >90% up >20% on May figures.**
- User parking has improved as a result of new parking enforcement and rider education features, including **updated mandatory parking zoning, machine learning-led end trip photo reviews and geographically specific rider education processes**. We understand the frustration regarding the delay in achieving 90% compliance but have now been able to deliver this via our new Parking Improvement Plan.
- **We have completed the rollout of our hardware retrofit to prevent further bike hacking and theft.** This is now live across our London fleet and has successfully prevented further thefts. **This behaviour was previously responsible for up to 40% of parking complaints received.**
- We have agreed and progressed new social value commitments, including a commitment to hire a **new Camden-based apprentice, more Lime Access discounted zones and free cycle training.**
- We have transitioned to a **fully electric and pedal powered operations fleet in Camden**, helping to further reduce local carbon emissions, improve air quality and reduce congestion.
- We have also successfully launched **Phase 2 of our e-scooter service (September 2023) in Camden** with >25,000 trips taken in the borough to date (October 2023).

# Record Phase 2 demand

<b>Lime Phase 2 e-bike service (June 2023 - present)</b>			
Total trips	Total riders	Total distance travelled	Average trip distance
> 1 million	>200K	>1.8 million miles	>1.6 miles
Monthly average			
Trips	Riders	Distance travelled	
>200K	>60K	>340K miles	
<b>Lime Phase 1 e-bike service (January 2019 - May 2023)</b>			
Total trips	Total riders	Total distance travelled	Average trip distance
>2 million	>300K	>4 million miles	1.7 miles
Monthly average			
Trips	Riders	Distance travelled	
>130K	>40K	>200K miles	

# Progress on parking

Following the previous Committee session (May 2023) - and in the context of record Phase 2 usage - **Lime has improved parking compliance in Camden by >20% to >90%**. This has been achieved by successfully addressing previously identified parking issues and implementing our new Parking Improvement Plan:

## Issue

## Solution

### Technology

- **Mandatory parking zoning:** Mandatory parking zoning was not stored on the bikes' central control unit (CCU) increasing risk of GPS drift. This GPS drift led to bikes being able to be left near bays.
- **Mandatory end trip photos:** End trip photos were reviewed manually by our dedicated parking review team. Team members were incentivised to review set numbers of photos per day leading to quality control issues.

### Technology

- **Mandatory parking zoning:** Lime e-bike firmware has been updated to store zoning directly on the CCU. This has reduced latency in identifying a designated parking bay, reduce GPS drift and improving overall parking accuracy.
- **Mandatory end trip photos:** Photos are now reviewed via Lime's in house machine learning technology. This prevents quality control issues and increase our London-wide review capacity. In future, the machine learning tool will allow for preventative action rather than retrospective warning and fining.

### Rider education

- **In-app messages:** We were previously unable to send geographically specific on-trip rider education messages when a user enters Camden or starts a trip here.

### Rider education

- **In app messages:** New rider education features allow us to target riders in Camden based on location and trip patterns.
- **Destination entry:** Our new destination entry feature creates a trigger to send Camden-specific parking information to the user if they enter a destination in the borough (including the nearest available parking bay to the location).

# Progress on parking

## Issue

### Bike hacking

- **Bike hacking:** Lime bikes had been subject to vandalism and theft via a hacking technique that allowed them to be ridden without power. Despite accounting for only 2% of rides, hacked trips were responsible for up to 40% of parking complaints received London-wide.

## Solution

### Bike hacking

- **Bike hacking:** We have completed the rollout of our hardware retrofit to prevent further bike hacking. This is now live across our London fleet and has successfully prevented further thefts and antisocial behaviour.



# Further improvements required

**Lime understands the accessibility and safety concerns created by even a limited percentage of non-compliantly parked e-bikes, particularly in the context of ongoing record Phase 2 usage. The monitoring and management of these issues also have a significant impact on officer resources and time.**

In recent weeks we have worked closely with officers to design and implement a **Parking Improvement Plan** (details provided on following page) **that has allowed us to deliver >90% parking compliance in Camden.** We understand this is a minimum requirement and - with this plan now in place - **aim to exceed 95% parking compliance by June 2024.**

**We welcome further testing of our enforcement processes including the new measures we have introduced to exceed our 90% compliance requirement.**



# Parking improvement plan

New measure	Expected impact	Implementation date
Rider enforcement		
20% more enhanced fining zones	Enhanced fining zones increase the initial user fine level to £10 and have a proven impact on reducing vehicle abandonment rates. Adding 5 new zones - focused on non-compliance hotspots and high footfall areas in the borough - will improve overall compliance and help prevent obstructive parking.	Implemented
Bluetooth beacon pilot	Bluetooth parking beacons offer improved accuracy versus GPS drift, allowing us to enforce compliant parking to within <2m. We propose working with Camden Council to pilot the technology this spring, focusing on high usage boroughs where we have recorded issues with GPS drift. If the pilot is successful we can roll out the technology in more locations.	March 2024
Rider education		
End trip photo guide	Our end trip photo guide feature trains riders in realtime on how to take a correct end-trip photo. This ensures a higher quality and standardisation of end trip photos, preventing inconclusive photos being recorded and further improving review accuracy.	Implemented

# Parking improvement plan

New measure	Expected impact	Implementation date
Rider education		
In-app bay display	In-app bay display shows a photo of each parking bay to the rider in-app, allowing them to view the location in advance and given them complete certainty as to where it is located and how they should leave their vehicle. Lime pilot data shows this has a positive impact on parking compliance, improving preventing vehicles from being left immediately outside of bays.	March 2024
Operational changes		
2 more Camden-dedicated e-vans	As parking compliance has improved we have recorded more complaints relating to overcrowded or untidy bays, and fewer complaints of abandoned vehicles outside of bays. To improve responsiveness to overcrowding and allow for faster removal of high volumes of vehicles we have added 2 more e-vans to our Camden patrol team. Our existing 15 patrollers will remain working across the borough focused on vehicle retrieval, tidying and battery swaps.	In place



# Wider considerations

## Spread and density of parking bays

**The most critical factor in improving parking compliance remains parking density and spread across the service area.** Camden Council has worked effectively to implement a network of dedicated micromobility parking bays. However, there are still some gaps and limits to the network such as in West Hampstead that create non-compliance hotspots.

**Lime research shows that riders can be unwilling to walk >100m to the nearest parking bay, with a density of >25 bays per sq km required to remove inconvenience barriers and ensure good parking.** Lime worked with officers to provide data and funding for 22 new bays but we estimate >250 more locations are required to ensure compliant parking across the borough.

## Use of bike racks

To provide an immediate improvement in the spread and density of parking locations in Camden (and with approval from the Council) **suitable bike racks (>4 stands) should be added as designated parking locations.** Since the previous Scrutiny Committee session **this approach has been taken by other central London boroughs such as Westminster and Kensington and Chelsea.** **Lime has delivered >90% parking compliance from launch in these boroughs using the same enforcement technology as in Camden.**

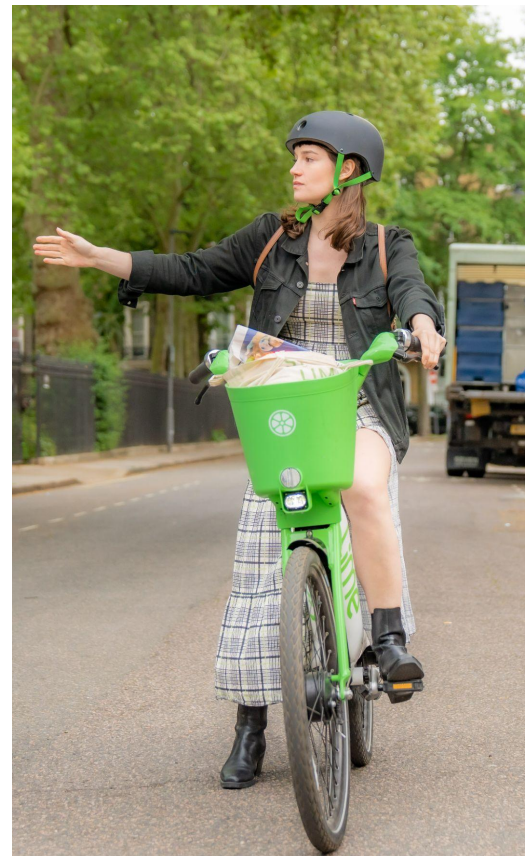
We understand concerns that this would impact parking capacity for private bike users **and propose funding up to 2000 more bike stands (double our current fleet size) in Camden to address this.** This means private cyclists in Camden would have even more places to park as a result of this arrangement.

# Standardised parking rules across London

One of the key factors in improving shared e-bike parking compliance in Camden (and across London) **is reducing confusion regarding borough by borough parking rules**. This is an existing focus area for Transport for London and London Councils who are working on a proposal for a standardised London-wide service.

In the meantime, Lime has made significant progress working with boroughs to sign standardised operating agreements which include requirements for how users can park. **We have now signed agreements with 16 London boroughs, including 9 which - like Camden - require mandatory parking at designated locations**. This includes the neighbouring boroughs of Westminster and City of London (pre-existing contract). We are due to pilot mandatory parking in Islington and have launched a preferred parking service in partnership with Haringey. **These agreements help to standardise parking rules for riders across London and improve the experience of our service for non-users**.

Agreeing them in this format (rather than a London-wide contract) also allows for boroughs - including Camden - to generate increased licence fees from providers which can be reinvested in active travel schemes.



# Delivering social value

As part of our new Phase 2 contract, Lime is also working with Camden Council to deliver significant social value, this includes:

Commitment	Impact	Implementation timeline
Skills and development		
Apprenticeship opportunities	Lime is hiring a Camden-based apprentice on an 18 month contract. The apprentice will work within our operations team across different roles to maximise learning and development opportunities. We are currently working with the Council on the recruitment process.	Ongoing
Engagement with local schools	Lime is engaging with local schools to offer careers talks and other skills and development opportunities. Recent examples include attending a careers fair hosted by UCL Academy and the Camden Clean Air initiative.	Ongoing
Accessibility and cycle training		
Accessible vehicle options	Lime is working with our UK Disability Advisory Board partner Wheels for Wellbeing to fund new accessible vehicles for their fleet. These can be used by eligible Camden residents free of charge and are aimed at increase access to and overall uptake of cycling in the borough.	March 2024

# Delivering social value

Commitment	Impact	Implementation timeline
Provision of cycle training	<p>Lime will provide monthly free cycle training sessions in Camden by our specialist cycle training partner, Bikeworks. We estimate 500 residents will be trained per year. All attendees will receive a free helmet and ride code.</p> <p>We are also working with Camden Cycling Campaign to provide free access to our vehicles for their Cycle Buddy programme, including for monthly Mental Health rides in partnership with Kentish Town GP network.</p>	March 2024
Community support		
Lime Access and new Access Zones	<p>Lime already has &gt;2500 Access users signed up in Camden, helping to ensure the service is affordable for everyone who needs it in the borough.</p> <p>In addition to promoting further Access sign ups, we are now working with officers to design more “Access Zones” in areas of higher deprivation in Camden where bikes are automatically available at Access prices, removing process barriers to claiming the discount.</p>	Ongoing
Volunteering and support for local charities	<p>Lime has already donated over £20,000 in the last year to our London “Hero” partner the Felix Project, which helps to save surplus food and redistribute it to local food banks, including in Camden. Lime team members are also given 4 free days volunteering per year to support local charities.</p>	Ongoing