

# Contents of this slide pack

- The analysis presented in this slide pack is preliminary and has yet to be subjected to peer review.
- If you wish to use or cite any of the findings, please first contact [i.Philips@leeds.ac.uk](mailto:i.Philips@leeds.ac.uk) for the latest results and citation.
- Outputs will be regularly uploaded on to the project website <https://blogs.brighton.ac.uk/elevate/>



# ELEVATE

Innovative Light **EL**ectric **V**ehicles for **A**ctive and  
Digital **T**rav**EL**



**UNIVERSITY OF LEEDS**  
Institute for Transport Studies

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**EPSRC**

Engineering and Physical Sciences  
Research Council



**University of Brighton**

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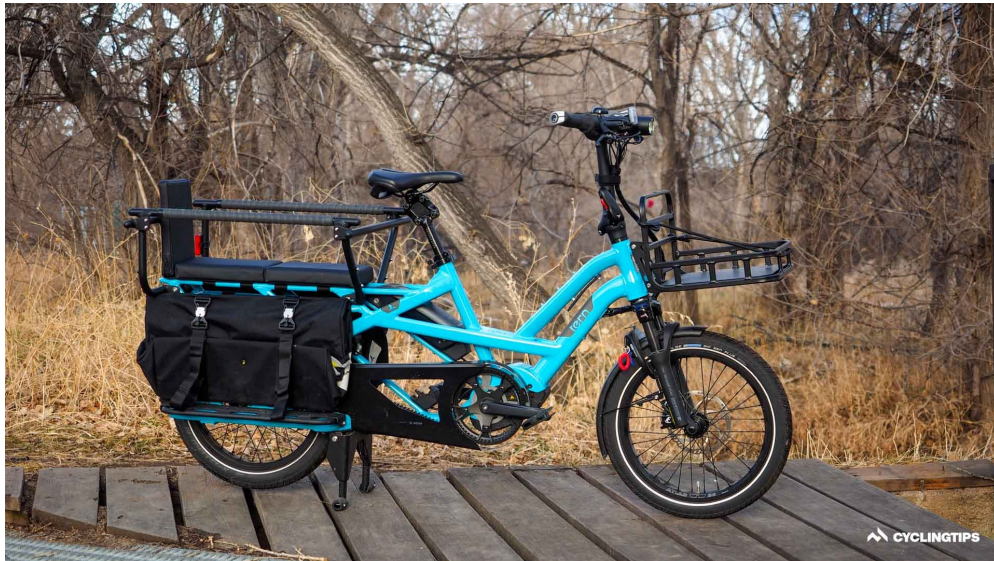


UNIVERSITY OF  
**OXFORD**





**Raleigh Stride**



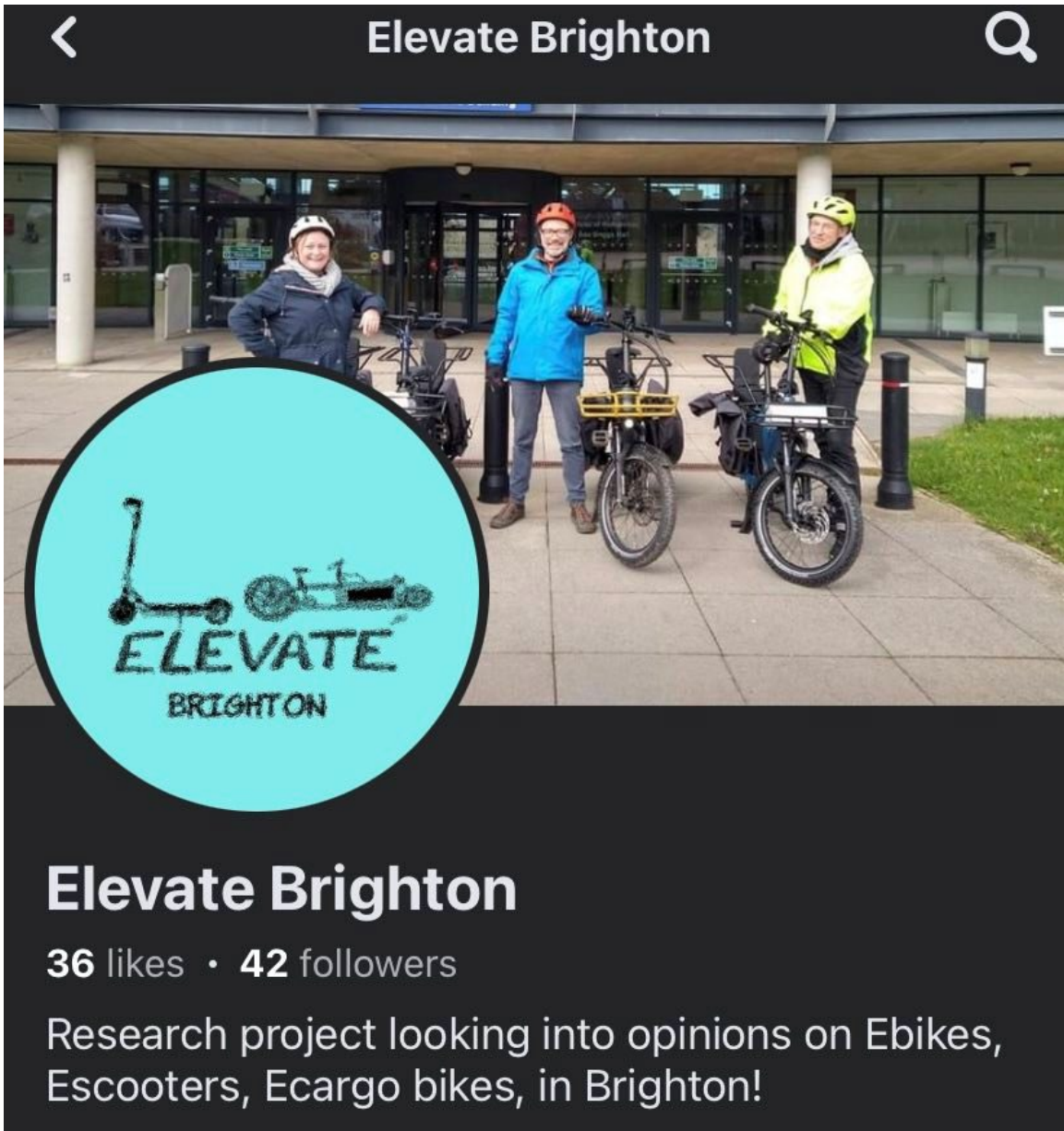
**Tern GSD**



**Riese and Müller Multitinker**

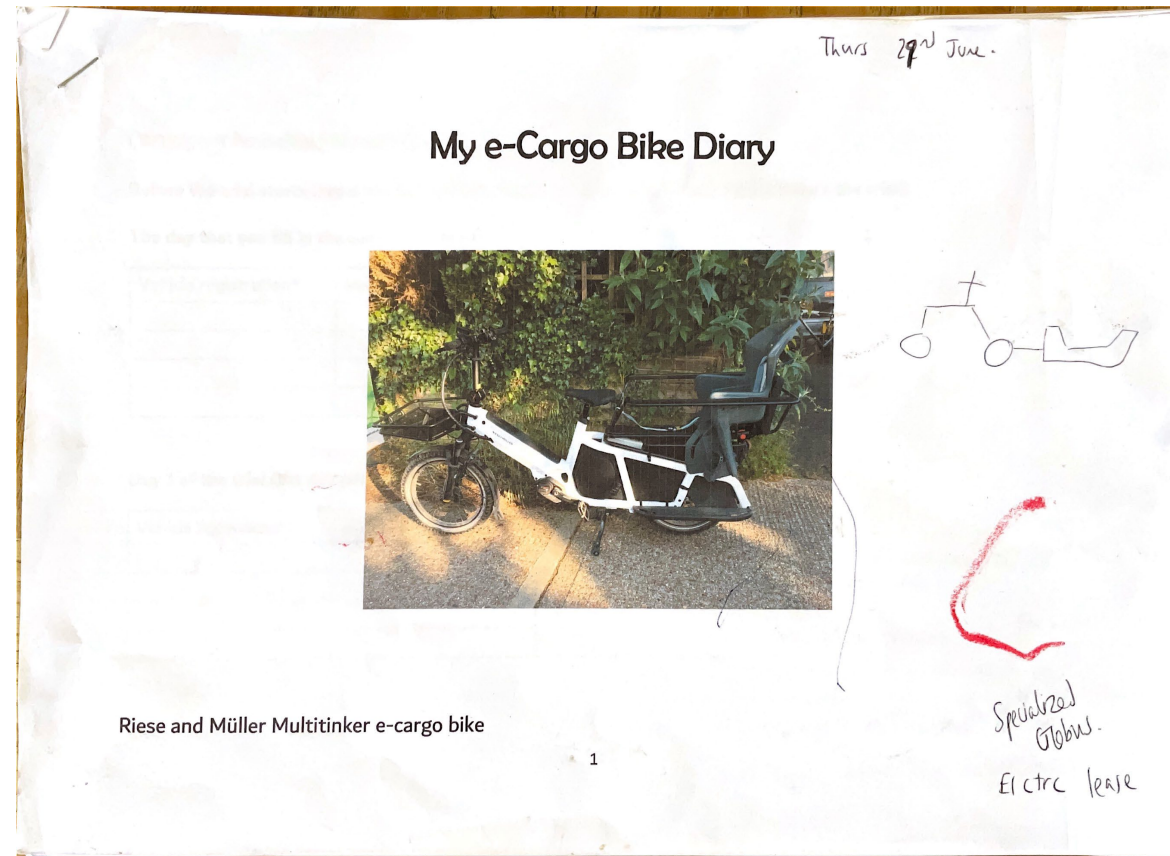
# DATA COLLECTION





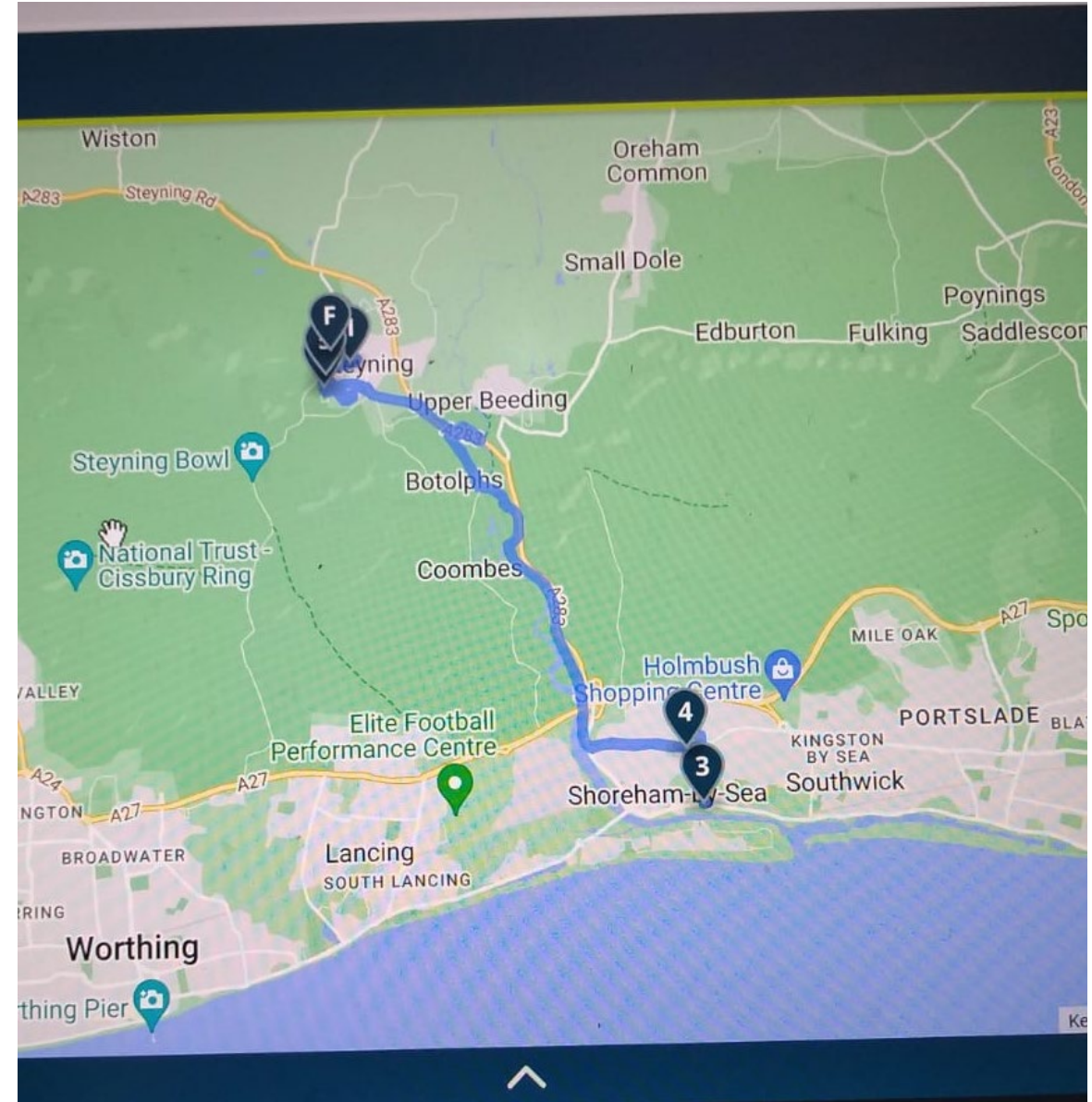
- National YouGov survey
- Facebook page
- Local survey used to gather general mobility data and recruit participants
- Facebook comments also collected

# TRAVEL DIARIES





# GPS TRACKING







# WEEKLY INTERVIEWS



## **Current analysis:**

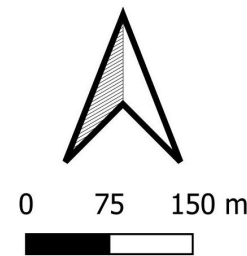
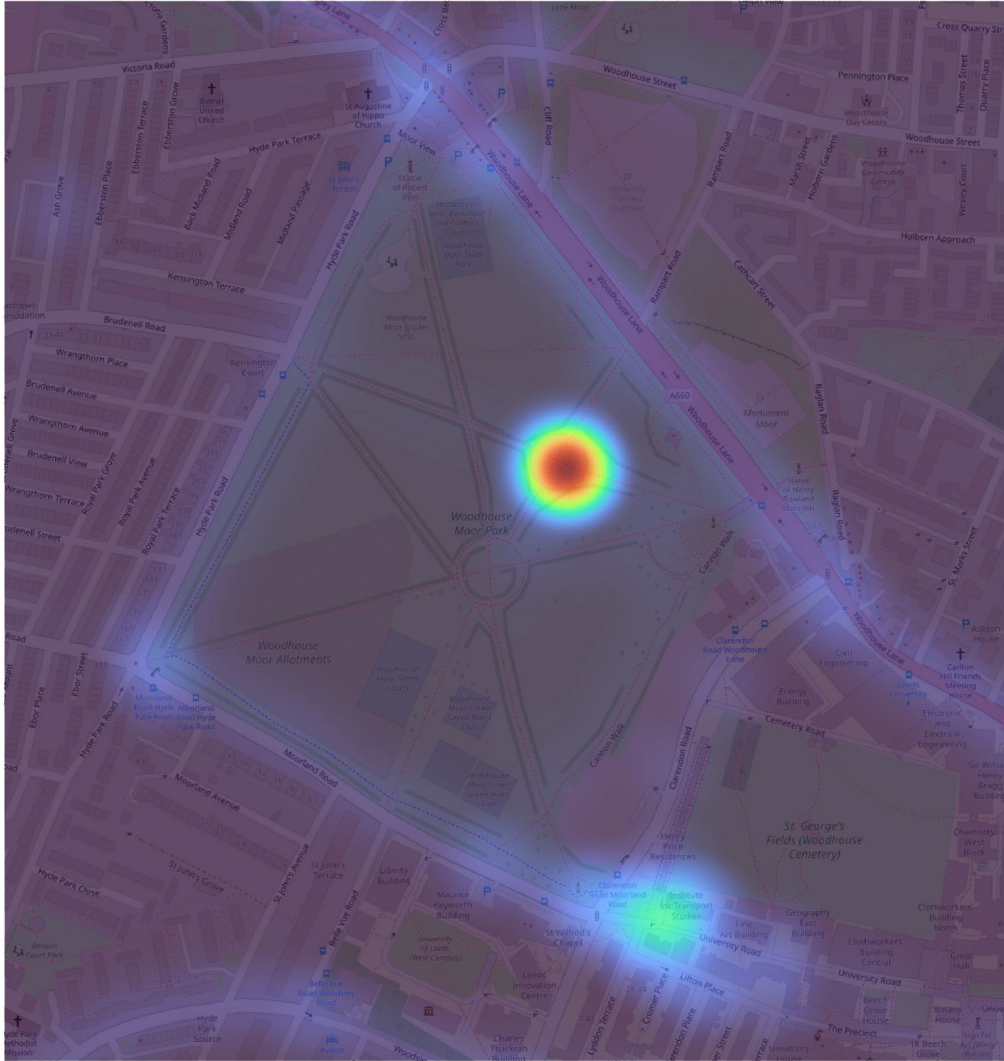
GPS data - trip frequencies, durations, times of day, routes, destinations

Travel diary data - trip purpose, weather dependency, modal substitution

Interviews coded – 80 themes – road surface, digital interface issues, mental health, multi-mode trip linking, social interactions, future imagined use...



**HARD(ER) DATA**



- Typical Brighton use radius 30 minutes / 5-6 miles

### Can see:

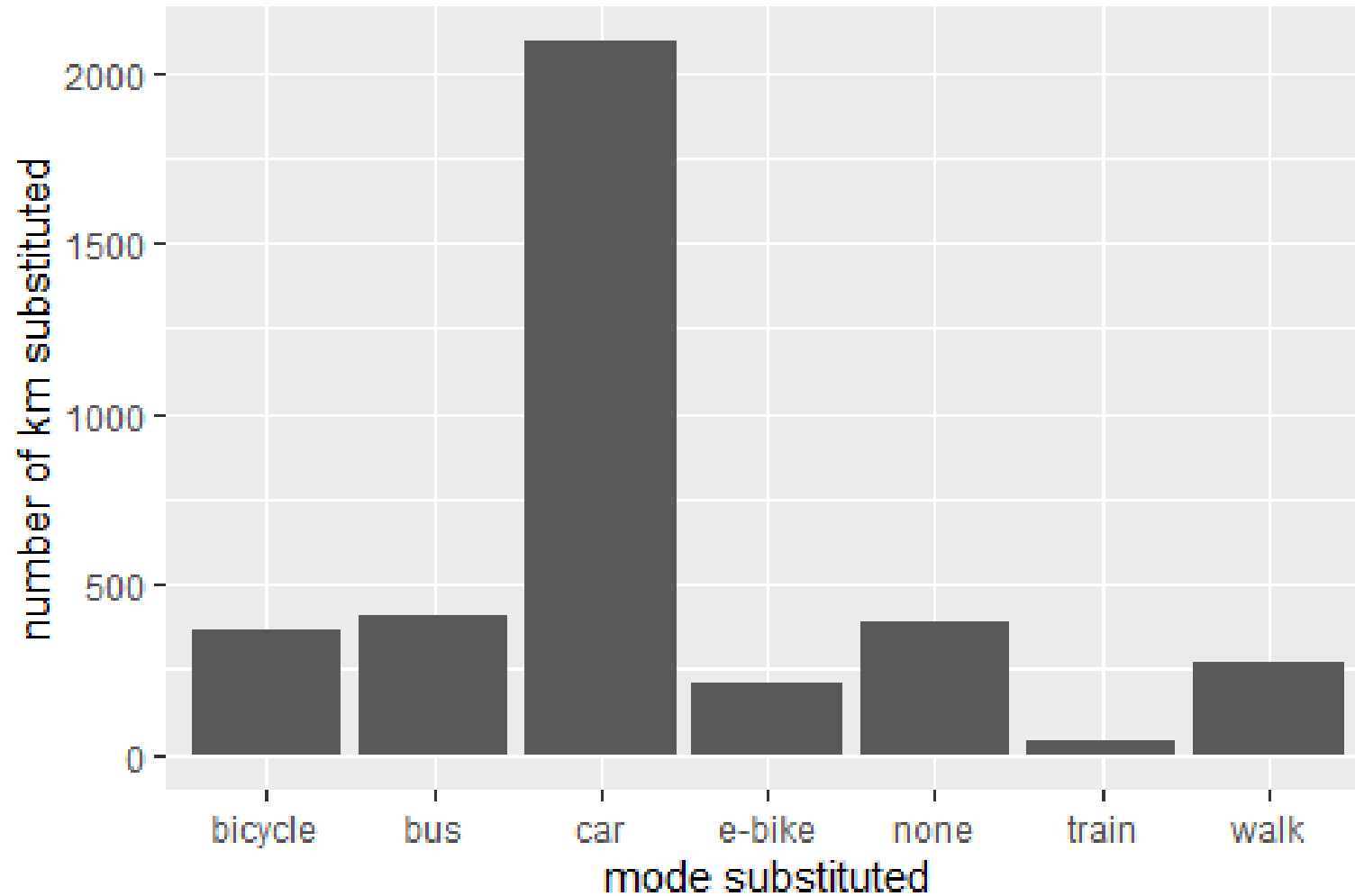
- What types of road / infrastructure are used / avoided.
- Heat mapping of destinations, identifying where parking is wanted.





Typical Brighton  
average power input  
100W = 'moderate'  
physical activity

# Leeds & Brighton e-cargobike trip substitution by mode(total km)



## The e-cargo bikes:

- Substituted over 2000km of driving
- Generated around 400km of new journeys
- Encouraged people to take the e-cargo bike instead of the bus



SOFT(ER) DATA



**‘I’ve never been one to cycle much around Brighton’**



**‘Would you recommend an e-cargo bike to other people?’**

**‘I’ve probably recommended it to like about 500 people this month. Definitely. Yeah.’**





**‘All the kids wanted to get on it, and me kind of going, oh, God, like can we do it another time, it's so hot, can we do it another time, but...’**





**‘Yeah, it felt good, I went around someone and I was like, I can’t believe I just did that really confidently!’**

# INITIAL OBSERVATIONS





‘No need for super skills or silly clothes’





‘Not a problem’





‘Drivers are more patient’





‘You’re seeing more  
of them around’

# PROBLEMS AND SOLUTIONS



# Riese and Muller Multitinker Vario 20

£5,839.00

 **Surge Boost** – £583.90 of free accessories with this bike [?](#)

OR

**£** Finance Available – Contact us for options. [?](#)

Gates Carbon Drive Belt  
65kg Passenger Limit



Key Feature

**Top quality long tail cargo bike with  
Bosch Smart System & low maintenance  
drivetrain**



Battery

**Bosch PowerTube 625 Horizontal**



Motor

**Bosch Performance Line CX (smart  
system)**



Gearing

**Enviolo hub gears & Gates Carbon B  
drive**





Cars Vans **Bikes** Motorhomes Caravans Trucks Farm Plant

**AutoTrader**  
Bikes

Used bikes New bikes Sell your bike Bike reviews E-bikes Electric bikes Finance Insurance

A black Raleigh e-bike is leaning against a tree in a grassy field. The bike has a large battery pack on the frame and a rear rack. The background shows a line of trees under a clear sky.

**E-BIKES**

The future of cycling

Make: Any

Model: Any

Postcode\*: Enter a Postcode

Distance: National

Min price: Any

Max price: Any

Search 1,825 bikes

Is an e-bike right for me?





In-house storage generally impractical – need large on-street hangars





In-town parking not secure – perhaps a dedicated space in multi-storey car parks?



What next for ELEVATE?

Follow our blog:

<https://blogs.brighton.ac.uk/elevate/>

Winter trials ending May 2024

Analysis continuing over the summer



180 CUPCAKES

**LITTLE GRAZERS** – e-cargo bike as a practical, fast delivery vehicle