Introduction

The ELEVATE project₁ is a research-council funded project, looking at the viability of micromobility options such as e-bikes and e-cargo bikes to reduce car use and encourage more sustainable travel habits. Work to date has included local and national surveys, and a series of e-cargo bike trials in the cities of Brighton, Leeds and Oxford. A recurring theme from our investigations, and many other studies, is that people would choose to cycle, but costs are a key barrier to e-cycle ownership and use. This note reports on key findings to date.

Context

When we recruited households to borrow e-cargo bikes, we inevitably got keen people who were willing to complete surveys and interviews to get hold of a bike for free. We never intended to get a 'representative' group of trial participants; rather we sought a cohort who were highly likely to be able to use the bikes a lot. We ended up with a group of 49 lead participants who, compared to the English population, were more likely to:

...be regular **cyclists**... have **children**...be **white** and ⅔ **aged 35-49**...be **degree educated**... live in **wealthy households** (£50k+)

The last point is important – with many dual-income, professional households, we expected that households might be keen *and able* to buy an e-cargo bike after trying one out. Indeed, although only **9**% of people in England₂ said they were somewhat to very likely to "**buy an e-bike in the next year**", one year after our trial loans:

...37% of households increased adult cycle
ownership
... 10 households (20%) bought e-cargo bikes
...1 household got rid of a second car

However, even with a wealthy group of households, the cost of purchasing an e-bike or e-cargo bike was a factor. A huge 65% of households said they were more likely to buy an e-cargo bike after our trials, but 67% stated cost was crucial in their decision of whether to buy one.

Meanwhile, we also identified that there are many other ways in which members of the public might be able to try out or purchase an e-bike or e-cargo bike, with subsequent use potentially contributing to car use reductions, alongside environmental and health benefits. These possibilities for access include:

- The Cycle to Work scheme
- Shared/public hire bike schemes
- Community sharing schemes
- · Bike shops' & councils' Try Before You Buy schemes
- Workplace fleets
- <u>leasing</u> arrangements

Different organisations funded by the Department for Transport have run different schemes that offered:

- Bike-fixing vouchers
- Interest-free loans and grants
- Free <u>loans and trials</u> of e-(cargo) bikes
- Local authority <u>loan schemes</u>
- Workplace schemes
- .. and so on...

¹ Funded by the Engineering and Physical Science Research Council grant UKRI EP/S030700/1.

 $_{\rm 2}$ and in our Leeds and Brighton surveys, compared to 14% in Oxford.

Stakeholder workshops

We therefore decided to run stakeholder workshops on the financial/access issues around these electrically assisted bikes. We hoped to address the following questions:

- Does simply increasing access to cycles increase cycling?
- Is affordability a 'real' barrier to cycle ownership?
- Are financial incentives effective in encouraging people to cycle more?
- Does the chance to 'try before you buy' alter perceptions of value for money and subsequent purchasing of cycles?
- Are leasing schemes popular and financially viable – and what are their pros and cons compared to personal ownership?
- What is the scope for increasing bike share schemes – and how do they interact with ownership?
- What are the policy priorities for local and central Government?

In the first workshop, we had 8 presentations to establish past activities and the current state of play. The videos of the presentations are available to view here, and the slides are available here. Sally Cairns presented findings on behalf of the ELEVATE project alongside the following key stakeholders:

Simon Irons Bicycle Association	The (e-)cycle market and industry priorities	
Steve Edgell Cycle 2 Work Alliance	The current Cycle to Work scheme	
Tim Burns Sustrans	Increasing cycle access for those on low income or not in employment	
Stephen Crick Green Bike Pool	Green Bike Pool – impacts and policy implications	
Tim Anderson Energy Saving Trust	National grants for e-bikes and e-cargo bikes	
Jenny Box Cycling UK	Lessons from the national e-cycle programme	
Patrick Utz CoMoUK	tz CoMoUK Current and future potential for bike sharing schemes	

Key findings from the first workshop displayed evidence that:

There has been substantial use of different access options:







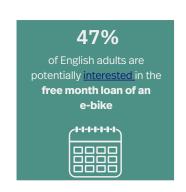


e-cycles were funded via interest-free loans to individuals and businesses in Scotland

There is substantial **interest** in **further** (e-)bike **access** options:

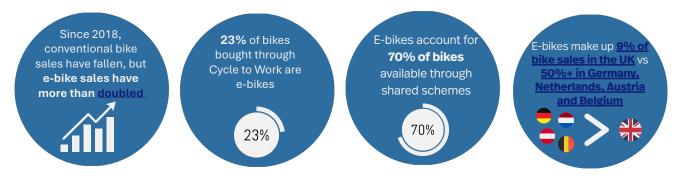








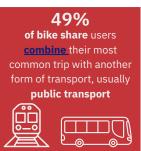
E-bikes of different kinds show particular popularity:



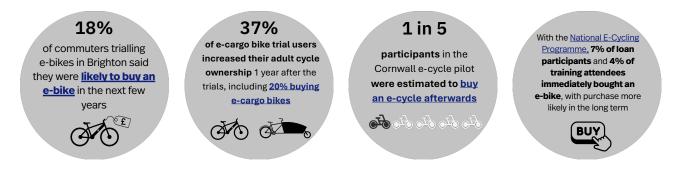
Schemes improving access to bikes affect the use of other modes:







Trial loans of e-bikes affect future cycling behaviour:



There are related issues that are known to affect the up-take of e-(cargo)bikes, especially storage, maintenance, fear of theft, lack of training, battery safety worries and misinformation, lack of cycling infrastructure and the impact of association with illegally ridden e-motorbikes.

A brief **survey** of workshop attendees revealed that they felt that **access** to **e-bikes** should be **improved**, with the option receiving the greatest support being the **reduction or removal of VAT** on cycles. Top priority groups for targeting support were seen as people on **lower incomes**, people **not undertaking recommended amounts of physical activity,** car **drivers/owners/second car owners**, and people with **disabilities**.

Workshop Two: ways forward

In the second workshop, stakeholders discussed a series of topics: the role of **retailers**; **try-before-you-buy** and **leasing**; the **impacts** of access schemes; **factors** determining scheme **success**; **barriers** to **policy support** for e-(cargo)bike access; and advice on **evidence** and **policy briefings** for change.

The discussions were under 'Chatham House' rules of anonymity to allow free discussion, and the following is a brief summary of the most important topics discussed:

Reforming the Cycle to Work Scheme Expanding Access through incentives and visibility	 Broad agreement that the Cycle to Work (CTW) scheme needs reform Urgent need to extend its eligibility to people beyond the well-paid PAYE employed Some suggested reducing CTW provider roles and exploring administration by HMRC or retailers Some CTW providers allow for payment of rental bikes, and more could do so Financial support is needed for the unemployed, low-paid, self-employed and retired groups and vouchers might be most suitable An 'exit strategy' is needed for people who access a free loan but cannot afford to buy a bike afterwards. Demonstrations and trial events, (e.g. in public parks), can increase community representation and visibility and can provide easy access to trying bikes. VAT reduction or removal (especially for children's bikes) and linkage to Bikeability training were seen as key to stop a decline in children's cycling.
Maintenance and Leasing	 Lack of maintenance support for e-bikes post-purchase is a consistent concern across stakeholder groups; various solutions- e.g. more mobile mechanics or built-in after care- could help Leasing options are still underdeveloped in the UK, but examples exist abroad (e.g. Germany)
Strategic Framing for National-Level Advocacy	 DfT, Active Travel England and local authorities already support active travel but are limited by funding and political narratives such as the 'war on drivers'. The Treasury is a key target for lobbying about financial support for e-(cargo)bikes. Arguments framed in terms of growth, the economy and jobs, accompanied by cost/benefit analyses, might be most influential (e.g. the value of ROI (return on investment) from (e-)cycling's co-benefits, including employment and NHS health saving) Comparing the costs of bikes to those of car ownership, especially second car ownership, is good messaging (although values will vary significantly for poorer groups that largely purchase second hand cars).
Strengthening Industry Messaging and Unity	 Key messages to policymakers are active travel's value for money co-benefits, and individual success stories, especially of under-represented communities. The industry needs a more coherent and united front, similar to the cohesiveness of the car industry and its lobbying power. The Walking and Cycling Alliance might play a key role in messaging and lobbying.

We thank all those involved for informative and illuminating workshops. The discussions were very rich and are necessarily briefly summarised here. They will frame and inform future outputs from the Elevate project.