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Inclusive Sustainable Cycling (ISCycle): Inclusive E-bike Uptake and Sustainable Use

Abstract

Ireland currently has high levels of private car use. We are investigating whether e-bikes can replace private car-trips. Our travel behaviour change strategy involves loaning people an ebike for 4-12 weeks. People choose from a wide range of bike types to fit their needs, along with family-friendly accessories (bike-buggies, seats etc.), safety-gear, and optional cycle confidence training. We report here interim results (n=61) from our first site — the University of Limerick — as well as findings on the environmental impacts of ebikes.

Research Outcomes



7km per week

People who were not cycling at all before the loan showed the biggest gains.

At the end of the loan, about half plan to buy a bike.



Recent use of bike-to-work scheme meant some people are waiting to become eligible to buy an ebike.

Seven ebike showcases demonstrated a distinct lack of knowledge about ebikes and cycle-to-work schemes.



Lack of secure parking (home, work, train stations, shops) was a barrier to biking more.

In our fleet of 56 ebikes we have had no battery or motor failure — repairs have been 'normal bike repairs'.



"Big day today — I am participating in the ISCycle study at UL where you get the loan of an e-bike to see if it encourages active travel. I haven't ridden a bike for 30 years but today after 2 hours of brilliant training, I cycled home from work & survived".

Recommendations

- Target ebike loans to those who currently do not bike to have the largest impact on mode shift.
- Widen and diversify access to bike subsidies to support families, those falling outside of tax-based subsidies.
- Change bike subsidies to include second-hand bikes, and for people to change bikes as their needs change.
- Facilitate repair, resale, and recycling of ebikes through supportive measures, e.g., challenging the insurance industry and provision of mechanic training.