

SeE Cycling Differently 2021 - 2024

Pedal Power Inclusive Cycling Charity



Report Date: 3 July 2024 Director: Sam Farnfield

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Executive Summary



Our fleet of e-cycles went out **on hire** for **2,432 days** through the project running from 2022-2024. Our fleet in Phase 1 was **36** and **47** in Phase 2

5,341 trips were recorded by the 23 trackers fitted to our fleet of e-cycles, recording an average trip length of 7.3km



83% of hires were for a day/part of the day, with **17%** opting for multiple day hire.

The trackers have recorded **2,573kg CO2 saved** by journeys made on ecycles. When projected over the use of our full fleet, participants have saved an estimated **4,341.9kg CO2**

81% of participants said that e-cycles encouraged them to make

journeys they would not have other- **preferred not to say.** wise made.



86% participants reported a **positive impact on their health,** and 96% of participants reported a **positive impact on their wellbeing.**

94% of participants said they would consider hiring an e-cycle again with50% of those intending to hire monthly and 40% weekly.

74% of participants said they would **consider purchasing an e-cycle**.

The biggest barrier to owning an ecycle was the **cost (51%)** of e-cycles. Other main barriers were: **Secure storage (22%)** and **road safety** (9%)

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Of the **208 people** who gave information regarding their gender identity, **59% were Female**, **36% Male**, **1% Non Binary** and **3% preferred not to say.**

Participants of the project were roughly **evenly spread** across **adult age brackets** with a small number of teenagers also participating.



75% of participants who took part in e-cargo cycle training reported feeling **more confident** following training.



1. Project overview

The See Cycling Differently project intended to provide regular Pedal Power users, many of whom identify as disabled, the opportunity to use adapted e-cycles such as recumbents and tandems to enhance their cycling experiences.

1.1 About the See Cycling Differently Project (Phase 1)

1.1.1 Background & Context

Friends of Pedal Power Project Ltd (Pedal Power) was awarded £257,150 in August 2021 to be spread across 2 years. The project, See Cycling Differently, was aimed at increasing the service offering to the accessible cycling charity's 1500+ membership and wider users across Cardiff by providing a fleet of e-cycles. The project ran until March 2023.

See Cycling Differently intended to provide the regular Pedal Power users, many of whom identify as disabled, the opportunity to use adapted e-cycles such as recumbents and tandems to enhance their cycling experiences. This included enabling users to go further, ride unsupported and for new users, to benefit from the charity's services where previously they could not.

The project also aimed to provide wider reach to families and communities of the Cardiff area by encouraging the use of e-cargo and 2-wheel e-bikes.





Because of Pedal Power's existing offering of low-cost cycle hire and membership, the new e-cycle fleet was not offered for free as with other projects. Rather, it was embedded as part of the charity's usual hire process and set up to provide long term benefits as a permanent offering long after the project had finished—remaining there to be enjoyed by all those living in Cardiff and wider South Wales area.

To support the uptake of these new e-cycles, Pedal Power offered free e-cycle taster sessions for anyone to try different cycles and enjoy the benefits without a cost. These were targeted to the user and provided the opportunity for testers to ask questions in a friendly and supportive environment.

To monitor the project, Pedal Power provided See.Sense trackers on all project cycles to collect data. Additionally, all users were asked to complete a questionnaire detailing their e-cycling experience and provide feedback.



"It's difficult to test ride E-bikes, we are lucky to have the ability to do this at Pedal Power!"

Friday e-cycle group ride





1.1.2 Infrastructure

Pedal Power is a localised Cardiff charity, operating two sites in the city. The main site in Pontcanna is open year-round and is located on the edge of Bute Park - near the city centre with good access to amenities and safe cycle routes in the park and Taff Trail. It also has good on-site provision including a café and accessible toilets.

The smaller, second site is in Cardiff Bay and situated on the Cardiff side of the barrage. The location offers safe cycling access to the coast and Vale of Glamorgan. The provision is seasonal (spring and summer months only) and smaller than the main site but still provides a selection of adapted cycles such as side-by-side trikes for users to hire and enjoy.

However at the start of See Cycling Differently, this site was less permanent, operating out of shipping containers, with no running water or electricity on site. The site was therefore without charging facilities for e-cycles and Pedal Power was concerned that an increase in users would put further pressure on the already creaking infrastructure with the reception run from a garden shed and aging shipping containers.

Therefore, as part of See Cycling Differently, Pedal Power requested additional funds to enable the provision of additional amenities, security, and storage at the Bay site. This included an officeequipped shipping container with mains electricity and a point for running water. Also, additional shipping containers to replace the old leaking containers and a one-side-opening container to increase storage capacity at the main Pontcanna site.





1.1.3 Overcoming hurdles

There was a plethora of issues for us to navigate in the autumn of 2021.

Covid-19 lockdowns were still impacting large parts of the world, leaving manufacturers with huge delays due to factory shutdowns and port closures. The knock-on impact was huge price increases, and global shipping delays meaning the price of transit for a single shipping container increased exponentially, thus so did the purchase price of these containers.







In addition, the UK was particularly impacted by border control changes with the decoupling from the European Union after Brexit, leading to increased border authority procedures. This created delays, new processes, and additional paperwork at ports and more points of contact for goods shipped.

Some manufacturers removed the offer of shipping direct to the UK, deciding to leave this for the purchaser to organise, and others increased their prices.





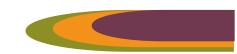
To help navigate these hurdles, Pedal Power began early talks with manufacturers, keeping in good standing to purchase the specialist cycles required for See Cycling Differently. Therefore, although the orders were beset with long delays, Pedal Power was able to purchase all but one of the required cycles at trade prices. Shipping across Europe for the specialist trikes and adapted cycles was organised in-house, with cycles arriving in late 2021 and early 2022.

Where as price savings were found on cycles, the container prices were at this point over 3-times the original price. The non-standard office and side opening containers were commissioned and the basic 20ft containers were both sourced from local providers.

Unfortunately, we encountered more setbacks as the manufacturer commissioned for the containers fell into liquidation and was unable to deliver either container. A new manufacturer was sought with time now under significant pressure.

By late-Spring 2022, Pedal Power were pleased to have the Bay site operational again. Mains electricity and running water were now in place, along with secure containers and the benefit of CCTV for security. Path-works in the area had provided a cycle path on the doorstep of the site, and through an additional grant from Keep Wales Tidy, the site had a community garden space designed to support increased community engagement.





1.1.4 Communities and project engagement

The official launch of See cycling Differently in spring 2022 saw close to 100 attendees trying out the new e-cycle fleet during a visit from the Deputy Climate Minister, Lee Waters.



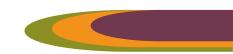
Lee Waters (left) riding recumbent e-trike

Local authority representatives from Cardiff, Vale of Glamorgan and Newport were there alongside Transport For Wales and many other community and transport groups and organisations.

Previous Director Sian Donovan promoted the project to the Cross Party Group For Active Travel and NHS Move More Eat Well Initiative as well as to CCHA and Taff and Newydd housing associations in a bid to encourage e-cycle use in both the health and community housing sectors. The offer of taster sessions was very well received however engagement with the next step - loans for use by staff as pool cycles and regular beneficiary use—was slow to uptake and unfortunately floundered.

Tasters were extremely successful with local community organisation, Women Connect First, linking to the regular Breeze rides from Pedal Power. They were early converts to e-cycles, along with SRCDC, Elderfit and Tremorfa Day Service who became regular and enthusiastic users of the new Velo wheelchair cycle.





Cardiff Council, Transport For Wales and Sustrans all took part in multiple inclusive cycling workshops using the enhanced Pedal Power fleet to apply their everyday cycling expertise and link with the accessible cycling world.

"I think it would be great if Welsh Government funded organisations like Pedal Power to market and offer more test rides or open days for people to try e-cycles (cargo and otherwise) to encourage people who aren't actively looking to give them a go."

E-recumbents were a hit at Llandough Hospital and after support from Move More Eat Well, a regular neuro rehab group was set up, riding weekly from Pedal Power. This group is continuing in to 2024 as a wonderful success of the See Cycling Differently project and e-cycles.

"I really enjoy it and it's also helped boost my confidence getting out after being secluded due to illness. I used to cycle before I got ill, it's an amazing feeling to be able to do it again using a trike with e-assist."



Rhys Holmes on recumbent trike. Rhys now rides an ICE trike weekly and is a strong ambassador for e-cycles and Pedal Power





1.1.5 Cycles (Phase 1)

Cycles were specifically selected from manufacturers across Europe with the aim of enabling the greatest number of participants to enjoy their benefits. Also cycles were selected to enhance users experience by overcoming impairments.

Accessible Cycles

- 2 x Ice Trike Adventures
- 1 x HP Velotechnik Gekko
- I x Van Raam Easy Rider
- I x Van Raam Easy Rider Sport
- I x Van Raam Fun 2 Go and Fun Train
- 1 x Van Raam Velo Plus
- 1 x Mission E-
- 1 x Hase Pino

Standard 2 wheel cycles

- 4 x Raleigh Motus
- ◊ 6 x Ridgeback
- o 2 x Van Raam Balance
- ◊ 8 x Isla E-Janis

Cargo cycles

- 1 x Reise & Muller Pakster
- 1 x Raleigh Stride
- 2 x Tern HSD
- 2 x Tern GSD

"Remember not everyone cycles on two wheels"





1.2 Phase 2 of the project

1.2.1 Broadening Engagement

With Phase 1 of See Cycling Differently demonstrating a positive impact on Pedal Power's core users, See Cycling Differently was awarded a further £60,000 of funding to continue the project until March 2024. This allowed for the purchase of additional e-cycles that had been identified in Phase 1 as being important to enhance the Pedal Power fleet. Alongside this, the taster sessions and engagement continued.

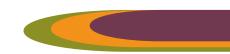
Through phase 1, Pedal Power proactively increased contact and communication with similar organisations across Wales. In Phase 2, it took further steps to support increased knowledge sharing by developing and publishing a directory of services. The aim was to further raise awareness of/access to the sector, as well as creating a forum for participating organisations to feedback on experiences and share knowledge.

1.2.2 Free training & loan

To help tackle the barriers of cost and confidence, two of the most common feedback points from Phase 1, Pedal Power designed a new model for engagement that focused primarily on cargo and 2wheel cycles , both of which had seen a lower-than-expected uptake.

Acting on Phase I feedback and learning, a new element was added to the project to provide free loans to local community groups, third sector and CIC's with the intention of broadening users' engagement with e-cycles in communities across Cardiff. Coupled with the loan, free cycle training was offered to support uptake and leave a legacy of core skills.





For these groups, the main barriers to accessing these cycles were storage and insurance. Group insurance proved costly for some organisations to source, with their concerns focused on a high-value item being stored on their premises. More common was simply storage, with some organisations taking up the cycle training but then unable to take a loan of a cycle safely and securely.

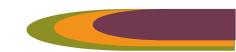
A key success was that three of the participating organisations and groups sought funding and were successful in purchasing e-cargo cycles for use by their teams. A further two are in the process of seeking funding as the project ends.

"In my opinion this training was critical. Three of us in the Wyndham St Pantry did some excellent training with Gill including a session on bike handling. Even though I commute by bike in town traffic every week it was still really important to learn how to manage the e cargo bike, especially when loaded. "

A key learning was that whilst the bespoke training gave positive outcomes, the process of providing it was labour intensive. Some riders needed to be taught from scratch and/or needed many lessons before reaching a point to be able to begin national standard training and heavy-loads cargo bike training.

That said, the model has been well received with excellent feedback and five organisations committing to take part in the project just last month. Now with a waiting list, additional funds are being sought to continue this element of See Cycling Differently.

"The training we received was crucial for the safe use of the cargo bike please keep the scheme going."





1.2.3 Cycles Phase 2

With one specific e-cycle unattainable in Phase 1, Pedal Power sought to further enhance it's fleet with the Isla E-Joni low-step lightweight 2wheel cycle, because it is excellent for cycle training, older riders and returning to cycling. Alongside this a handcycle would complete the ecycle fleet.

Standard 2 Wheel Cycles

5 x Isla E-Joni

Accessible cycle

1 x Da Vinci Speeder Handcycle

"It has inspired me to use e-bikes more and I felt great in the fresh air."





1.2.4 Outcomes and future plans

The intended outcome was for community groups to be able to purchase e-cycles for wider use by their staff, volunteers and users, thus removing the cost barrier for regular users. The free cycle training would also build core skills amongst these groups, with the longerterm benefits of behavior change which would support wider active travel aims - either using e-cycles or standard non electric cycles.

In Phase 2, organisations received free cycle loans and/or training.

Six of these organisations did not take up any part of the loan process, all siting problems with storage, and three others were delayed by problems with insurance. Of the six loans, three used cycles for day loans only.

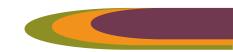
Three successfully purchased cargo cycles after participating in the project with a fourth still seeking funds.

1.2.5 Directory & Forum

Pedal Powers holds a strong belief that there should be a similar provision to all communities across Wales. With awareness patchy and knowledge-sharing poor between local authorities, third sector and communities, the concept is simply to raise awareness of the accessible and inclusive cycling services available in Wales.

Pedal Power regularly receives requests for support, guidance and direction from users and organisations, so provision of a directory of services would give long-standing support to share knowledge. Alongside this, a forum comprised of members of these organisations would meet periodically to discuss issues, share knowledge, and support each other in strengthening the sector.





1.2.5.1 The Directory

One key requirement for the directory was that the offer must be sustainable with an ability to update and answer questions. Also, it needed to be available in both English and Welsh, which was achieved as part of a wider project to make the whole Pedal Power website bilingual.

To create the directory, Pedal Power began researching other organisations that provide inclusive and accessible cycling in Wales. The current version is published on the Pedal Power website and lists the details for 13 organisations.

1.2.5.2 The Forum

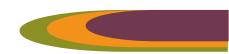
The forum held its first meeting in Autumn 2023. Feedback received was that it adds value, that knowledge sharing in the sector requires support and that funding is essential for all organisations to continue.

Pedal Power has also begun working on sharable documents to support governance and management, a key area raised by some forum members. These will be available to share for free as the directory continues long after See Cycling Differently.

1.2.5.3 Continuing support

When building the directory, it became clear that provision was inconsistent across different local authorities in Wales. It also became evident that the delivery and scale of offering differs by area. Some are provided by volunteer groups and charities solely dedicated to accessible cycling, some are off-shoots of charities supporting communities with cycles as one strand of their aims, and some are local authority provision in community buildings and health-supported provision - often adult services or physiotherapy led.





The routes of access to these organisations for users are also inconsistent as models differ and provision is regularly swayed by financial and staff/volunteer requirements.

Access to direct support for these services as well as sourcing equipment is patchy, which is why Pedal Power will continue this work after the See Cycling Differently project ends. Stakeholder engagement across Wales will be maintained to encourage connection with these organisations for local and national benefit. Forum meetings and ongoing plans to increase support for these groups will therefore continue.

1.3 Learning

For the new fleet of accessible cycles the benefits surpassed our expectations. Riders returned to cycle more frequently, cycled further with increased independence.

"Feel more positive, see new areas, try new experiences."

For two cycles in particular —the Fun2Go and the Velo— usage numbers increased in comparison to their non electric counterparts, and more support workers and carers took part in cycling with the knock-on benefits of users enjoying more cycling experiences.

"I'm a support worker so e-bikes make it easier to support people and enjoy the session."





For those au fait with cycling, cargo cycles became a big hit—kids, dogs, shopping and work trips became easier with a cargo bike!

"The e-cargo bike simply allows me to do the school run by bike so even more of my journeys can be by bike. More cycling in any form makes me very happy. I think it makes the kids happy too as they find it more fun and quicker than the car or double buggy."

Many people reported being nervous when first trying an e-cycle, uncertain exactly what it was, how fast and how safe it would be. Information and support, alongside learning and cycle training, maintain uptake and increase regular riding. Specific heavy loads training for cargo bikes gave riders the knowledge to transition from the pleasure of cycling into making utility rides.

Older people and those returning to cycling hailed the joys of cycling so much that we now have weekly trike and confidence rides which support the community and social aspect of cycling. These groups are mainly comprised of e-cycles.

"Very impressed by the e-cycle. It allowed me to be part of a group ride, to cycle/ride up hills easily and to cycle further..."

Many people reported being nervous when first trying an e-cycle, uncertain exactly what it was, how fast and how safe it would be.

"Improved my mental health massively. It made me realise I could cycle again with an electric bike."







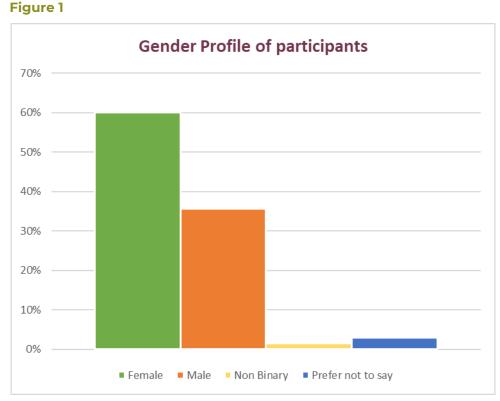
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2. Evidence

This section addresses the evidence requirements set by Welsh Government. The following analysis considers See.Sense GPS tracker data, survey responses and participant interviews.

208 surveys were returned. Where there are instances that questions were missed the number of responses recorded in the charts will be noted by (n=)

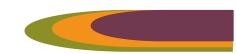
2.1 Demographic profiles of participants



2.1.1 Gender

Fig 1: Of the people who gave information of their gender identity 60% Female 36% Male, 1% Non Binary and 4% Preferred not to say.





2.1.2 Age

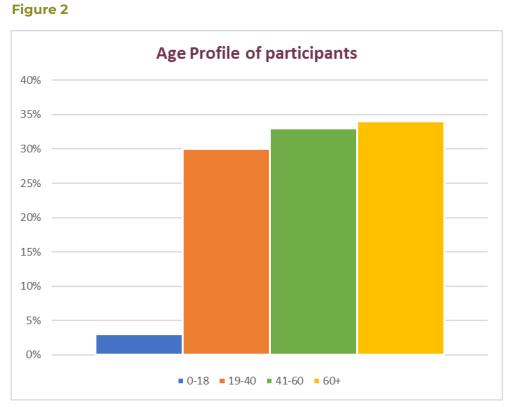


Fig 2: The age profile of our participants was fairly evenly split between the adult categories with a small number of teenagers (of eligible age to ride e-cycles) also participating n=197.







2.1.3 Employment

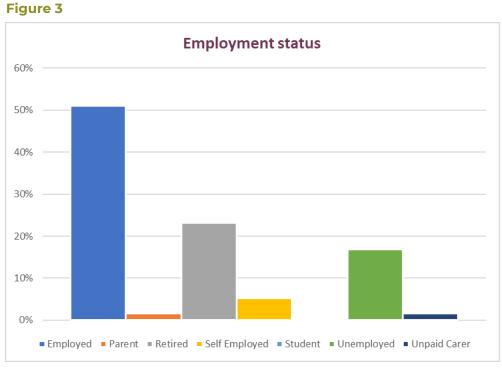


Fig 3: 51% of participants were employed, 23% retired, 17% unemployed, 5% self employed, 2% parent, 2% unpaid carer and 1% student n=190

2.1.4 Ethnicity

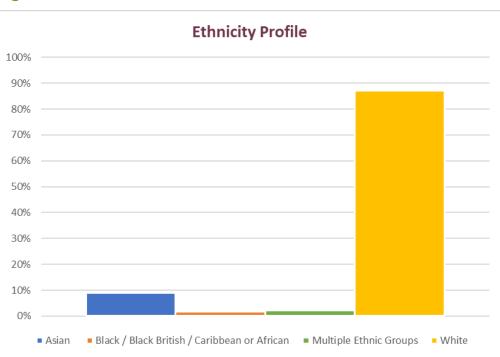


Figure 4

Fig 4: Reporting for ethnicity was challenging despite our anonymous data collection system due to apprehension surrounding the sharing of personal details n-178





2.2 Disability

Not all participants were able to complete the questionnaires. Many of the users successfully conveyed their views, some were completed by paid and unpaid carers, and there was a portion that chose not to participate due to privacy and data protection.

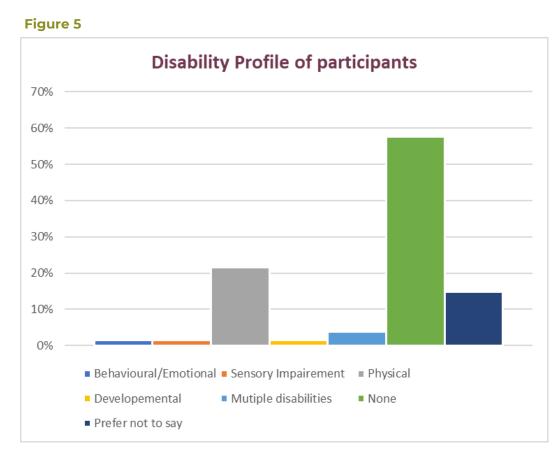


Fig 5: The combined response for disability was 29% with 58% of respondents answering that they did not have a disability.





2.3 Perceived benefits of having an e-cycle

2.3.1 Personal wellbeing & health

Figure 6

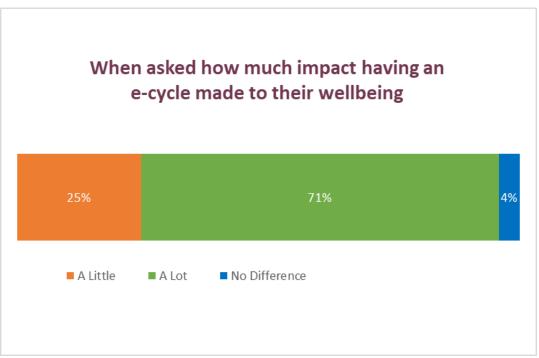


Fig 6: 96% of Participants told us using the e-cycle had a positive impact on their wellbeing n=195

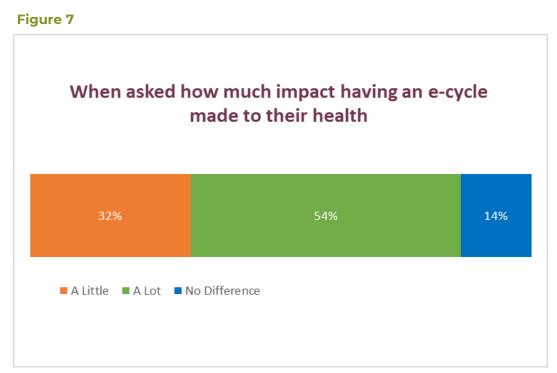


Fig 7: 86% of participants told us using the e-cycle had a positive impact on their health n=193





2.3.2 Impact on journeys



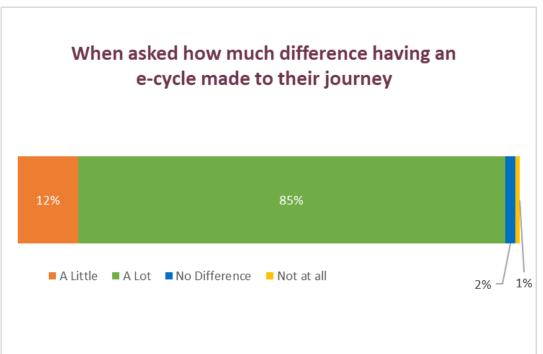


Fig 8: 97% of Participants told us the e-cycle made a positive difference

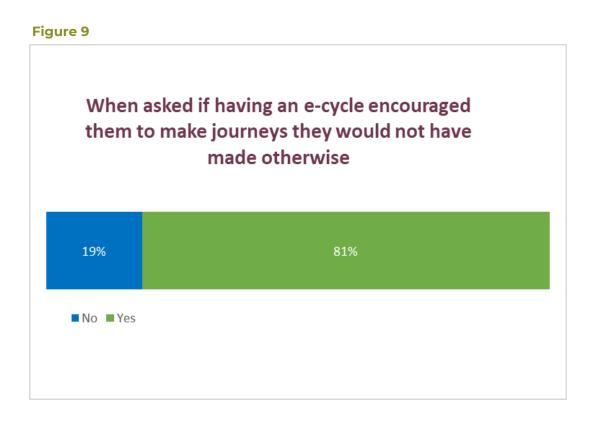
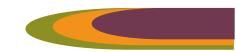


Fig 9: During phase 2 of the project participants were asked if having an e-cycle encouraged them to make new journeys and 81% told us that it did n=42





2.4 Loan & trip statistics



Fig 10: Participants were asked about the length of time they were hiring the e-cycles. 83% of hires were for a day/part of the day with 17% opting for multiple day hire n=75

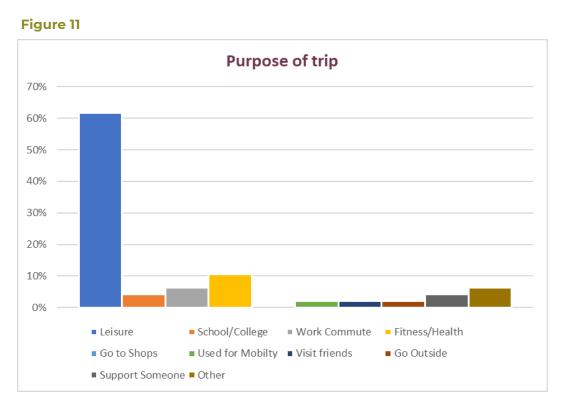


Fig 11: 62% of participants who chose to give this information reported leisure as being the primary purpose for hiring an e-cycle n=47







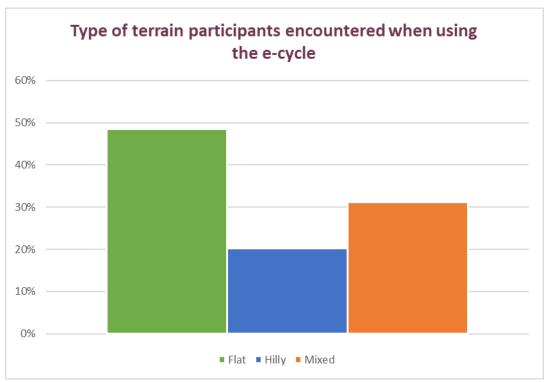


Fig 12: The majority of trips made on our e-cycles were in Cardiff and the surrounding areas. Pedal Power is located adjacent to Bute Park and the Taff Trail with cycle paths to the Cardiff Bay area, all of which are mostly flat terrain n=202

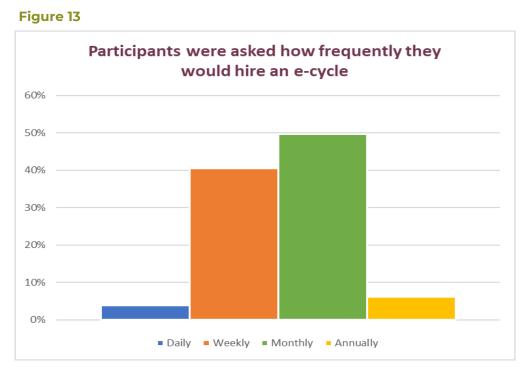
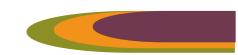


Fig 13: When asked how frequently they would hire an e-cycle monthly and weekly options were most popular with our participants n=131





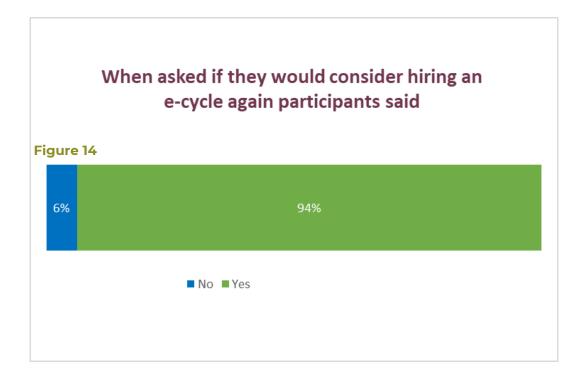


Fig 14: 94% of participants asked said yes they would consider hiring an e-cycle again n=195

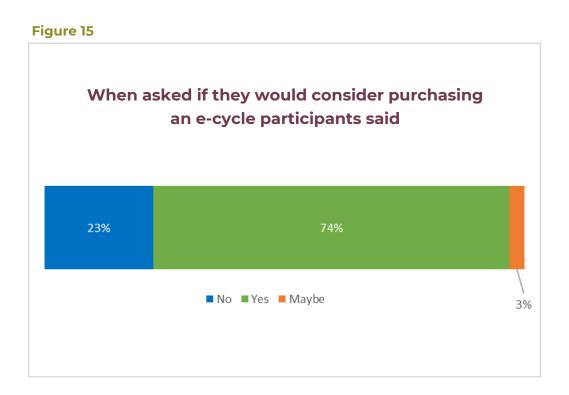


Fig 15: 74% of participants said they would consider purchasing an ecycle after loaning one from us n=190







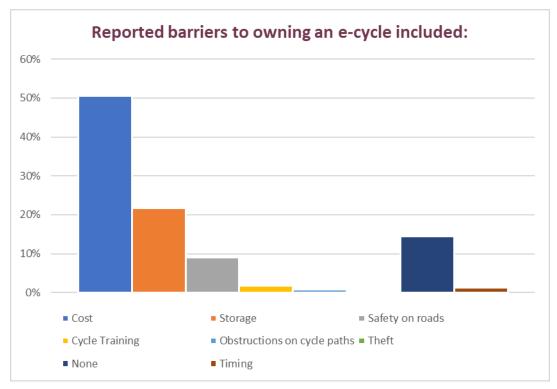


Fig 16: Our participants reported multiple barriers to owning an e-cycle with cost and storage being the most prevalent. Anecdotally, amongst people using the accessible trikes, concerns about obstructions on cycle paths was a growing concern.

"The biggest barrier to (owning) a trike is if you take it out there's nowhere to park it. There's no facilities that will take an e-trike and certainly the Easy Sport that I ride.

Also pinch gates, primary example would be Hamadryad Park, one of the best parks in Cardiff, if you're riding a tricycle, you can't go in there, especially if you have got mobility issues, because they've got kissing gates, and a trike won't go through kissing gates easily, and if you've got mobility issues, you can't get off that bike and pull it through."



2.5 Active Travel

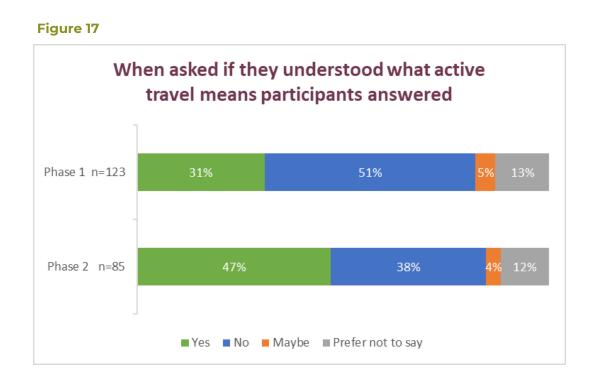
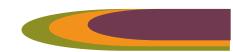


Fig 17: We asked participants what their understanding of active travel is. Between phase one and phase two we saw a clear increase in awareness.







2.6 E-cargo training

After taking on board feedback from participants in phase one, e-cargo cycle training was introduced in phase two as part of the offering for organisations taking part in the long-term loan scheme.

Staff and volunteers from community organisations were offered e-cycle training ranging from basic skills through to more advanced on-road training and cycling while carrying loads. 75% of participants who took part in the training reported feeling more confident using the e-cargo cycle following the training, with the remaining 25% rating their confidence as already proficient before starting the training.

Organisations have reported back to us that this training has been very beneficial, not only for the confidence of their staff and volunteers, but also in securing their multiple-user insurance for their e-cycles. Further organisations have anecdotally reported additional benefits from the cycle training, such as more of their staff and volunteers choosing to cycle to and from work as well as cycling for their work.

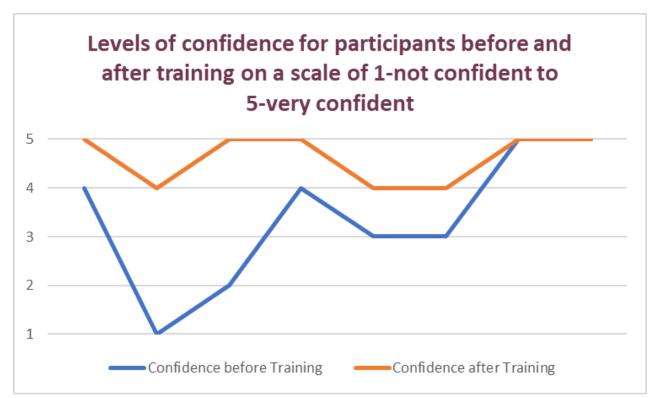
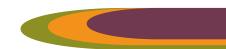


Figure 18



2.7 Differences between Phase 1 & Phase 2

Figs 19-22: The following charts show data for cycle hires. These figures do not take into account the length of hire so multiple day hires have been counted as a single hire not each individual day.

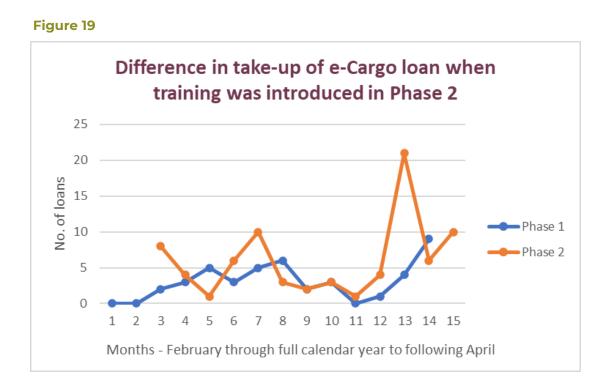
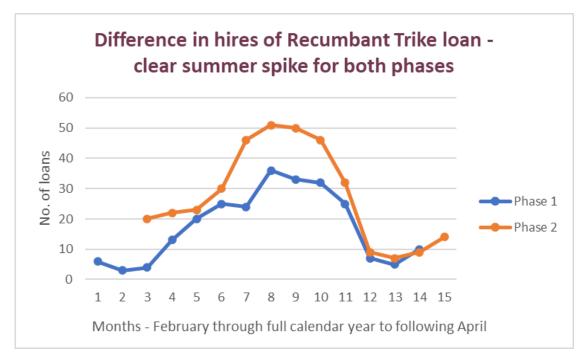


Figure 20





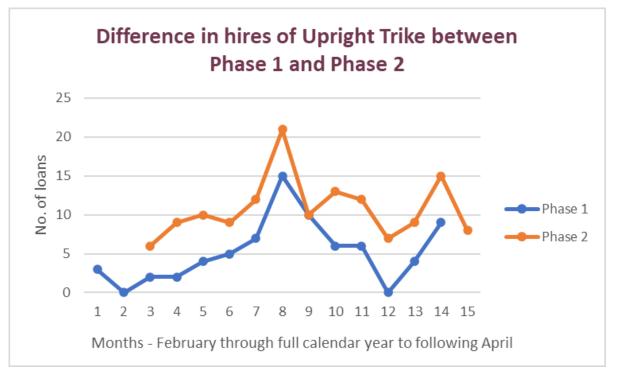
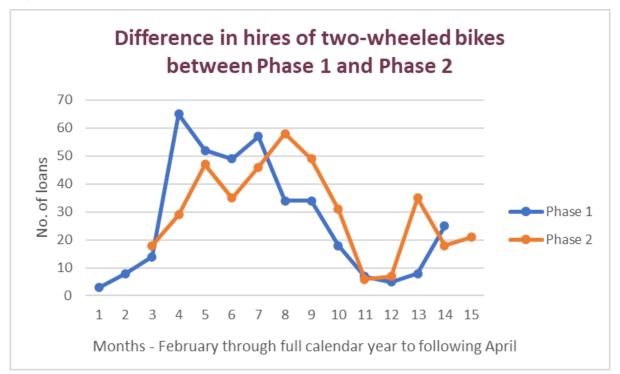


Figure 22



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2.8 CO2 data recorded from e-cycle trackers

Trackers were fitted to 23 e-cycles in our fleet. Fig 23 below is a summary of the data collected by the trackers. Not all trackers were compatible with the full fleet of e-cycles and there were a few installation and warranty issues with some of our bikes.

Throughout the project we experienced problems with data recording. Data upload was not consistent due to the mobile network signal in the South Wales area. We worked closely with our tracker provider to try to overcome these barriers, but not all could be resolved. Therefore the data shown below is not fully representative of the outputs of the project as a whole.

E-cycle type	Average of Distance Travelled (km)	Average of Avg Speed (km/h)	Sum of Trips	Sum of CO2 Saved (kg)
Cargo	6.0	6.6	979.0	340.5
Recumbent Trike	7.0	6.5	1288.0	635.0
Side by Side	7.7	6.8	804.0	338.3
Tandem	3.0	5.0	50.0	15.8
Trike	4.8	4.8	487.0	184.4
Two Wheel	11.5	8.3	1146.0	920.9
Wheelchair Trike	3.9	4.3	587.0	138.2
Grand Total	7.3	6.5	5341.0	2573.0

Figure 23









2.8.1 Actual CO2 data collected

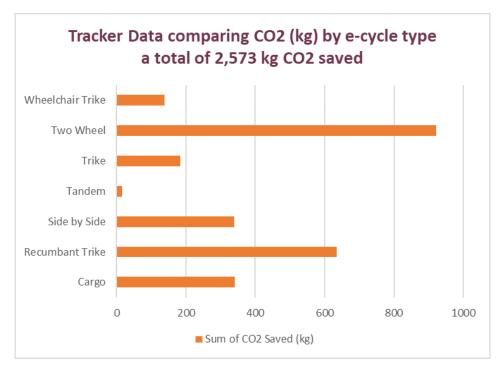


Figure 24

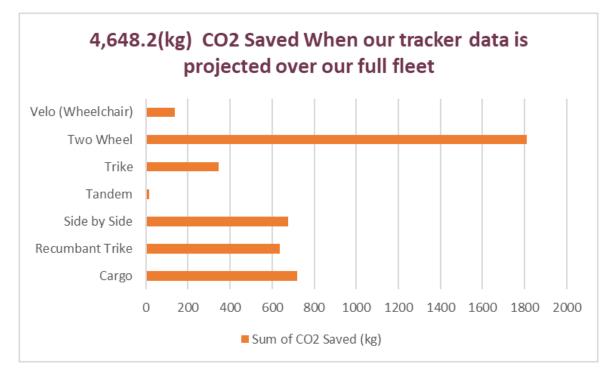
2.8.2 Projected CO2 (kg) savings data to reflect our whole fleet of e-cycles

To give a more representative picture of the CO2 (kg) savings for the full fleet we projected calculations taken from the e-cycles fitted with trackers. The CO2 (kg) calculation was taken from the tracker data to find the CO2 (kg) value for a single cycle of each type then multiplied by the number of cycles in the fleet.





Figure 25



The resulting CO2 (kg) savings are still a conservative estimate due to the limitations of the original tracker data uploads, however the potential for the CO2 (kg) of our full e-cycle fleet can be seen with an estimated total saving of 4,648.2 (kg) CO2 saved by journeys made using our e-cycles.





3. Case Studies

3.1 Linda, Recumbent Trike

"I was riding a manual recumbent most of the time and I was doing really well on it but the electric ones are absolutely brilliant for hills, having that electric assist makes a world of difference".

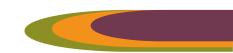
Linda returned to cycling after a break of about 25 years and did a sixweek course with Pedal Power to regain lost skills and confidence. She tried several types of cycle including a standard two-wheel bike, upright trikes and recumbent trikes before finding her perfect fit.



"When I first started, it didn't come with the idea of exercise, I needed to get back out into nature. I just wanted to know if I could ride a two wheeler bike so that I could go out cycling on my own. I did the two wheel cycling but it was never really my comfort zone, but the minute they brought out the recumbent trike it was fabulous!

Linda now uses the Easy Rider Sport with electric assist and regularly joins our weekly group rides, enjoying the social aspect as much as the cycling. The electric assist also enables her to take part in our longer rides such as Pedal Power's annual Ride for All.

"Certainly, if I'm going to go a distance, I don't think riding a manual I'm able to do that anymore. The e-bikes made that (Ride for All) a walk in the park, you know, I don't have to think twice about it. I know I can do it because I've got the electric assist."



3.2 Rhys, Recumbent ICE Trike

"The Ice Trike also has e-assist, which is great for hills, but I only tend to use it when I need to because my main goal is to improve the strength in my legs to aid with everything else. It's not just the physical aspect that's a factor for me. Getting outdoors, and cycling around the lovely parks, and up the river Taff gives such a huge mental boost."

After losing his hearing, the abilityRhys hasto walk and suffering withPedal Powimmense balance issues, Rhys wasber 2023.diagnosed with a rare neurologicalcondition. Our cycling officer wasable to work with Rhys to assess**"Having**his needs and adapt our ICE Trikewhen I wAdventure with toe clips to helpwowed'Rhys keep his feet on the pedals.adapt an



Rhys has now been attending Pedal Power weekly since November 2023.

"Having been a keen cyclist when I was younger, I was 'wowed' that there was a way to adapt and cycle again. I was introduced to a recumbent trike, something I was able to use with my poor balance, and disabilities. I was like a kid at Christmas".

Rhys continues his rides for fitness and leisure and has started completing road cycling training with our cycling officer to give him the confidence to take his cycling to the next level. Rhys has told us that the impact Pedal Power has had on his life has been transformative.





3.3 Louise & Family, E-Velo & Raleigh Cargo



Louise is in a care home and was first brought to Pedal Power by her carer to keep her active as her health and physical agility began to decline. Louise is now a wheelchair user, so her husband Richard continues the weekly sessions using the e-velo, our wheelchair accessible cargo trike.

He told us that they had enjoyed family, using our Raleigh e-cargo cycling manual bikes, and now the e-velo enables them to continue to enjoy cycling, keep fit and enjoy the freedom, fresh air, and views of the river.

"Without the use of the e-velo I would not be able to take Louise out, it has enabled us to both enjoy learn the bike with ease and I cycling and keeps me fit. Pedal Power is an inspiration to all disabled people and their carers, we are able to be in a normal situation and not feel embarrassed. The atmosphere at Pedal Power is wonderful and is the highlight of our week."

And it's become a family affair! Having had some training from our experienced staff, their daughter, Elizabeth is now able to join her parents on the weekly cycle rides with her young

bike, enabling three generations to cycle together rain or shine!

"I was a tad nervous to use the electric bike at first, but with instruction from the wonderful staff I was able to start slow and have never looked back. I have two small children aged five and two and a dog, plus my 68-yearold dad and my mum in a wheelchair and we are able as a family to all ride together which is incredible. We love the staff, the community, the joy we get from coming here has helped us immenselv."





3.4 Jackie, Mission Electric Trike

Jackie was diagnosed with **Multiple Sclerosis 18 years** ago and tries to keep fit by walking but has told us that cycling is so much more fun!



Jackie also struggles with her balance, so our cycling officers worked with her to find the right trike for her needs - her main goal was to enjoy cycling and have the confidence to ride wherever and whenever she likes cycling journey but still enjoys on her own.

"Coming here just gives me that bit more that I can do because I always feel like I can't do anything because of the MS but I can! I use the Mission Electric, which is great, I don't think I'd manage a non-electric as my legs wouldn't be strong enough. I like to use my legs if I can, but the motor's there if I need it "

Jackie had some coaching with our cycling officers and joined a weekly group ride to help build her confidence. She has now purchased her own e-trike to enable her to continue her coming to Pedal Power for the camaraderie.

"Before I used an e-trike I didn't really know what to expect but it's so much fun I just love it!! Everyone here has made me feel so welcome and even though I have a disability nobody makes me feel different!"

3.5 StarGarAllot & Splo-Down Food Co-op, Tern HSD



StarGarAllot and Splo-Down Food Coop are local community groups that grow food and run a food co-op in Splott, Cardiff. They took part in the second phase of our project where we brought in comprehensive cycle training on e-cargo bikes for their staff and volunteers. The training allowed participants to progress to advanced skills such as cycling with heavy loads and road training to build confidence while cycling in traffic across the city.

"We were really excited to be part of this project as we are all passionate about doing our bit for the climate crisis. The training provided by the Pedal Power cycling coaches was amazing. Each participant had an initial assessment, and the training was geared to their individual needs and starting skills set."

We developed a long-term loan programme for participating community organisations who had completed the cycle training with us, to bridge the gap between being trained to use the e-Cargo bikes and being able to access their own cycles. This has helped StarGarAllot and Splo-Down Food Coop to fully embed using E-Cargo bikes in the delivery of their community services.

"The E-Cargo bikes means we can transport more food, heavier loads and go further to make pickups or deliveries, and we are hoping to purchase an E-Cargo bike for our organisation in the near future. In the meantime, Pedal Power has made it possible for our trained e-bikers to maintain and develop their skills. E-Cargo bikes will help volunteers "future proof" their cycling choices as they are an enjoyable way to improve safety and stamina."

3.6 Cardiff Salad Garden, Tern GSD

Cardiff Salad Garden is a CIC operating in Bute Park Nursery. They have been delivering salad by bike to local restaurants and individuals in Cardiff city centre since 2017 and were looking to upgrade to an e-cargo bike, to improve accessibility for delivery volunteers and carry a greater load in each delivery. Taking part in our project allowed them to try three different types of e-cargo bike, testing which would be most suitable and meet their requirements. We then helped t to purchase their own e-cargo bike.

"We had set criteria, the most important being accessibility for people of different height and experience of cycling, the ability to transport a large volume of a relatively light weight product, maneuverability, delivery in tight urban spaces, and security."

Using the e-cargo bike we provided via the long-term loan program (while they waited for their new Tern GSD), and after completing our comprehensive training program, Cardiff Salad growers were able to increase the number of staff able to make deliveries.







"Our staff had cycle training from Pedal Power from a very skilled and patient trainer. This training was excellent and was a stipulation of our bike insurance that each rider had appropriate training before using the bike."

Participating in our project has helped Cardiff Salad Garden achieve their goals and expand their reach, further securing their green approach to making deliveries and working with volunteers and beneficiaries.



"Since getting the e-bike we have taken on another community garden. Riverside Community Garden is one of the oldest community gardens in Cardiff and was at risk of closure. Without the e-bike it would not have been possible to run the new garden. We will also use the bike to deliver vegetables to food pantries and kitchens in Cardiff - a much greener and easier proposition than driving through the city centre."



4. Positive outcomes & feedback

4.1 Legacy

Funding for the SeE Cycling Differently Project allowed Pedal Power to strive to **further it's aims** as Wales's largest inclusive cycling charity.

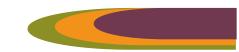
The **increased links** with communities, local authorities, national organisations, manufacturers and many more still remain today as intrinsic supporters of Pedal Power's journey.

An enhanced and modernised fleet leaves an invaluable legacy on the hundreds of regular riders at Pedal Power who now ride e-cycles. The new cycles have **enabled many riders to cycle** when previously it was not possible.

The charity you see today has **enhanced storage and facilities** which enable **more users** to go through the doors, and **benefit from Pedal Power's services** each and every year.

Learning from the project aims and feedback has set stepping stones for work on a **larger project** to continue the mission of seeing everyone enjoy the benefits of cycling.

"It's great to be able to hire an e-trike to try it out. We've really enjoyed our experience at Pedal Power; Positive, Encouraging, Patient, Informed, Friendly and Relaxed team of people. Thank you!"





4.2 Anecdotal outcomes & feedback

"The training we received from Gill was crucial for the safe use of the cargo bike - please keep the scheme going."

"I am a much better and safer cyclist on roads."

"Enabled me to take 2 children out - to/from school. Great to try before I buy one. Also excellent work Pedal Power do."

"It's difficult to test ride E-bikes, we are lucky to have the ability to do this at Pedal Power!!

"Hiring an e-bike was a game changer for us as a family. Thankyou!

"Improved my mental health massively. It made me realise I could cycle again with an electric bike."

"Really positive - Made my mind up to buy an e-bike."

"Freely moving with children in the city without a car."

" Really positive for mental health for whole family . Would love to hire it again for longer..."

"It was fun, great project! Made traveling with the dog much easier."

"Enjoyed using e-bike, also better/ more confident on urban roads."





"We noted how much safer the e-bike felt when sharing public roads with cars and cycling with our toddler in the rear chair (compared to using our trailer for towing them). You're more visible and at a similar speed to drivers and this is really nice. In summary, we wouldn't have bought an e-cargo bike without a test ride."

"Pedal Power has enabled me to get fitter, happier and healthier. I couldn't do this without the e-bike."

"Using electric trike really helped me because the electric picks up when I'm pushing super hard up the hills."

"Costs cut and healthy way of commuting"

"We spent 62 days walking the Welsh coastal path and ran out of time so hired the bike to complete the last three days"





