

# Best practice in engaging disabled people in cycling for active travel: research report

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## **Executive summary**

#### Introduction

This research was conducted by Cycling UK and funded by the Motability Foundation to understand how inclusive cycling centres can enable disabled people to access cycling as a mode of transport. It has been conducted alongside Cycling UK's Inclusive Cycling Experience (ICE) programme to explore how the programme is bridging some of the transport gaps for disabled people by addressing the barrier of the lack of cycle hire and loan opportunities.

#### Methodology

The research uses qualitative methods, including interviews and focus groups with delivery staff and participants from the ICE programme, plus staff and volunteers from 10 other inclusive cycling interventions across the UK, other active travel and cycling organisations, and disability organisations.

#### **Findings**

The research has shown that, whilst there is a gap in the existing provision for enabling disabled people to cycle for transport purposes, there are important ways in which some inclusive cycling providers are supporting disabled people to access cycling for active travel. This has enabled the following best practice recommendations to be generated. For individuals, there will be some aspects here that are more important or relevant than others, dependent upon individual barriers and needs, but these may be seen as a recommended pathway towards enabling people to cycle for transport:

- Inspiring and encouraging people to consider cycling for active travel: raising the profile of cycling as an active travel option through raising awareness of cycling interventions; communicating evidence of the positive impact of cycling for disabled people; and increasing funding to expand provision.
- Appropriate cycle availability and flexibility: demonstrating the range of different cycles and adaptations that are possible; and staff being knowledgeable about different models and adaptations.
- **Providing loans to use out and about:** providing opportunities for people to try out cycles on the roads and cycle paths in which they would be using them to ensure the cycle is practical and comfortable.
- Finding storage solutions: overcoming storage barriers by supporting people to learn how to move and lift cycles; providing advice on storage solutions; and considering shorter term day loans for those that cannot store overnight.
- Building skills and confidence to take a loan: offering skills and confidence sessions tailored to individual needs, with steps to enable



- progression to active travel; allowing space and time for informal learning amongst peers; and providing basic maintenance training.
- Supporting with local routes and infrastructure: helping with route planning; and providing led rides in new locations to increase confidence in cycling in a range of different places.
- Providing knowledge and advice on purchasing cycles: offering advice on the purchase of cycles and having links with local providers where possible.
- Training for those supporting disabled people: offering training or support for carers, support workers or families to enable them to support with adjustments and be able to assist with some basic maintenance skills.

Secondly, the research highlights some more general recommendations for consideration in the delivery of any cycling interventions for disabled people:

- **Providing inclusive sessions:** considering broader sessions which cater for all as these are likely to be more popular than sessions catering only for specific group(s) of disabled people.
- Understanding needs: taking time to understand the ways in which different barriers impact upon individuals, and what can be done to make cycling accessible for individuals in order to design a person-centred approach to delivery.
- Gathering feedback: working with participants themselves (where they want to be involved) to develop and design sessions that work for them and gather their feedback.
- Effective communication and managing expectations: having a range of contact options to meet different needs and preferences; offering opportunities for people to view sessions; ensuring people are fully informed about what sessions involve; allowing opportunities to meet deliverers in advance or to attend taster sessions.
- **Promotion and visibility**: hosting sessions in public spaces; promoting inclusivity of sessions through imagery and language.
- Ensuring accessibility of sessions and facilities: using accessible and easy to find locations; and providing information in advance on directions to sessions as well as on the facilities that are available.
- Offering year-round provision: exploring options to continue provision during the winter (if there is the demand from participants) including using indoor venues where possible; and offering alternative activities (for example social meetings) to enable people to keep their routine.
- Providing social time: making time for social interaction before, during and after sessions – even where participants progress to cycling independently for travel, they may still like the offer of social rides and opportunities.



- Employing the right staff and volunteers: providing consistent staffing; as well as staff who have strong interpersonal skills and who are passionate about the benefits of cycling for disabled people; consider less formal training around disability specific needs; consider the allocation of roles to ensure that there are people with maintenance, administration and organisational skills, as well as delivery skills.
- Working in partnership: working in partnership with other inclusive cycling providers, as well as wider community organisations, disability organisations and the health and social care sector, as well as local authorities.

#### Recommendations

This research can be used in the planning and implementation of inclusive cycling initiatives in the future, as well as by Cycling UK to inform the future delivery of the ICE programme. In addition, ongoing research and evaluation of inclusive cycling programmes to understand both the impact that they are having, as well as what works in delivery, will continue to build the evidence base in this area.



#### Introduction

This research was conducted by Cycling UK between April 2024 and March 2025. It develops evidence-informed best practice recommendations on how inclusive cycling centres can enable disabled people to access active travel options and cycling as a mode of transport. The research has been conducted alongside Cycling UK's Inclusive Cycling Experience (ICE) programme, funded by the Motability Foundation. ICE supports disabled people in Greater Manchester and Inverness to access cycling through free try-out sessions and loans of a range of standard and non-standard cycles and e-bikes.

## **Background**

Around 16.1 million people in the UK are disabled, representing 24% of the total population (based on data from the Family Resources Survey 2022-2023, Department for Work and Pensions, 2024). There is clear evidence of huge disparities in access to transport amongst disabled people in comparison to non-disabled people, and particularly in access to cycling. Research by Transport for All (2023), including a review of literature, a series of workshops and a survey completed by over 500 people, found that disabled people face barriers to all forms of transport (including public transport, private transport and active travel), and as a result make roughly 30% fewer journeys across all modes of transport than non-disabled people. As stated by Transport for All "for disabled people to truly be equal members of society, this disability transport gap must be closed" (2023: 6). Most notably, Transport for All showed that disabled people rated cycling as the most inaccessible of all modes of transport, rating their experience of cycling as 0.62 out of 3, and with only 4% of respondents saying that they could cycle with ease, while 41% said they could not cycle at all.

Sustrans and Arup (2020) report that 9% of disabled people cycle at least once a week, in comparison to 17% of non-disabled people, and 78% of disabled people never cycle. A study examining Sport England's Active People Survey data (Goodman and Aldred, 2018) shows substantial inequalities in relation to gender, age, disability, and ethnicity for both leisure and utility cycling amongst English adults, finding that that 3% of disabled people in England cycled for utility purposes in the previous four weeks, compared to 7% of non-disabled people. For disabled people, cycling has the potential to improve transport opportunities by providing a direct, autonomous, door-to-door means of transport (Berent et al, 2021). In addition, cycling can bring wider wellbeing benefits with potential to improve the independence and the physical and mental health of many disabled people (Inckle, 2020), who are twice as likely to



be inactive compared to non-disabled people in England (42% compared to 21%) (Sport England, 2018).

In 2017, Clayton et al. described that disability was an under-researched area within cycling studies and called for further research. The authors suggested the need to understand better the range of different contexts in which disabled people are cycling, particularly for transport purposes, and what the specific requirements might be. They argued that this would improve inclusivity in cycle infrastructure and help to develop guidance for designers and promoters of cycling. Similarly, a systematic review of evidence around interventions aiming to promote active travel (including cycling, walking and wheeling) noted that, across all included studies, there was very little consideration of disability, and when included this tended to be in the context of older or retired adults only (Roaf et al., 2024). The present research by Cycling UK builds an evidence base to understand what would better enable disabled people to cycle for transport. This contributes to wider evidence around what makes cycling accessible.

#### Review of literature

The first stage of this research was to conduct a literature review to collate and synthesise existing evidence to understand what is currently known around engaging disabled people in cycling as a form of active travel. The full results are reported in a separate document 'Best practice in engaging disabled people in cycling for active travel: literature review' (Cycling UK, 2025).

Most notably, the literature review found that there remains a significant gap in existing evidence specifically around engaging disabled people in cycling for active travel. The current cycling related literature often focuses on leisure cycling and describes infrastructure as a major barrier preventing many disabled people from making the transition to cycling for transport purposes, calling for investment in accessible infrastructure to improve opportunities for disabled people to cycle. Whilst there is clear evidence that a lack of accessible infrastructure is a major barrier for many disabled people, there is also a need to develop more evidence around ways that disabled people could be more effectively enabled and supported to cycle for utility purposes in the shorter to medium term through inclusive cycling interventions. The gap in evidence in this area indicates a need for more high-quality research to more fully evidence what works to generate evidence-based recommendations. This report helps to fill the gap, exploring how interventions can successfully overcome the wide range of other barriers faced by disabled people.

The evidence the literature review included was based on a combination of mostly leisure cycling related literature as well as wider sport, physical activity



and active travel literature. There was some useful and transferable evidence and guidance in this literature, focused on the following key themes:

- Understanding and targeting participants: the evidence shows that when developing any intervention there is a need for research and planning to understand the access needs as well as interests and preferences of the people that sessions are targeting. Following a social model of disability, this does not require a focus on a person's disability but rather on what can be done to better enable them to participate i.e. what would make cycling a more attractive and accessible option for them.
- Effective communication and engagement: there is a need for deliverers to consult with the targeted participants when designing an intervention, following a process of co-design and co-production, and gathering feedback as an ongoing process. This will help to identify the most appropriate methods of communication and engagement, ensure that participants are fully informed about what sessions involve, and help to empower participants.
- Delivery of sessions: there is not going to be a 'one-size-fits-all' approach for all participants, but rather there is a need for flexibility in design and delivery to provide choice and personalisation to meet the needs of participants and address their individual barriers. Taking time to identify the right cycle for individuals is important. In addition, making time for social interaction may be important for some disabled people who are more likely to be socially isolated, as shown by Office for National Statistics data on feelings of loneliness amongst disabled people (ONS, 2022).
- Workforce and partnerships: it is important to have consistent staffing as
  well as staff who have excellent 'soft people skills' to build relationships
  and deliver good customer service. Working in partnership with wider
  stakeholders and organisations is important to help improve local
  opportunities and identify local needs.

In particular, the wider evidence in the literature review shows that the amount of time required for planning any intervention with disabled participants should not be underestimated. Taking steps to get it right will help ensure repeat participation and for cycling to become sustainable for disabled people.

#### Aims of the research

Building on the findings of the literature review, the current research was designed to test the key themes that were highlighted. It also builds the evidence base around cycling for active travel by understanding examples of where this does work in practice. The research draws on learning from Cycling UK's ICE programme to explore how the intervention is bridging some of the



transport gaps for disabled people, in particular by addressing the barrier of the lack of cycle hire and loan opportunities. The research also collates learning from deliverers of inclusive cycling interventions across the UK to understand what works and what the challenges are in delivery, as well as insight from the perspective of disabled cyclists, other active travel and cycling organisations, health and social care, and disability organisations.

The research questions included:

- What are the barriers and enablers for cycling as a mode of transport for disabled people?
- What lessons can be learnt from cycling interventions with a focus on active travel?
  - o What works examples of delivery and success factors?
  - o What doesn't work examples of challenges?

The findings from both the literature review and the empirical research and recommendations produced in this report can be used in the planning and implementation of inclusive cycling initiatives in the future, as well as by Cycling UK to inform the future delivery of the ICE programme.

#### **Definitions**

Throughout this report, the term 'disabled' is used to refer to anyone who faces access barriers due to a physical or mental impairment. The terms 'cycling' and 'cycle' are used to refer to journeys made on all types of cycle including two-wheeled pedal bikes, e-bikes, trikes, handcycles, cargo-bikes, recumbents, and tandems.

## Inclusive and preferred language

This report aims to use inclusive writing and preferred language around disability. However, there are some examples of quotations used which do not use preferred language. When discussing and summarising the research findings, preferred language has been used, however all quotations have been written as verbatim in their original format. All quoted text appears in italics.



## Methodology

The methodology used for the research was qualitative in nature, including a range of interviews and focus groups conducted both face-to-face and remotely using telephone calls or Microsoft Teams. The research included:

## In-depth analysis of Cycling UK's ICE programme

- Focus groups held online with participants involved in the ICE programme from the hubs in both Greater Manchester and Inverness – four focus groups, including a total of nine people (eight participants and one family member of a participant).
- Workshop conducted face-to-face with the ICE team, including delivery staff from the two locations and programme management staff (a total of six members of Cycling UK staff).
- Ongoing capturing of learning from the ICE delivery team through regular team meetings and informal discussion over the course of the year.
- Review of participant case studies captured by the delivery team and evaluation data captured by the monitoring and evaluation team.

#### Research with the wider sector

- Interviews with staff and volunteers (both face-to-face and online/telephone) from 10 inclusive cycling providers (including inclusive cycling centres and charities running inclusive cycling initiatives). Some included more than one member of staff or volunteer, making a total of 14 people interviewed.
- Observation of two inclusive cycling sessions run by different providers.
- Online interviews with four staff from UK cycling or inclusive cycling organisations.
- Online interviews with staff from three disability organisations who had been involved in the referral of disabled people to inclusive cycling initiatives.
- Online interview with an academic expert in active travel.

All interviews and focus groups were semi-structured. A list of broad questions was developed, and these are included in the appendix to this report. However, there was flexibility to tailor these questions to different respondents, to ask additional questions or for further clarification, dependent upon initial responses. The interviews and focus groups were recorded where possible, and if not recorded then extensive notes were made throughout. Transcripts and notes were then analysed thematically, to organise the data into broad themes.



## Representation of findings

It should be noted that this research provides a snapshot of inclusive cycling provision in the UK but cannot be seen as fully representative of all provision that is available. Due to research staff capacity and the timeframe of the research, it was not possible to speak with all providers. The research did, however, include providers across all four nations of the UK, and aimed to include providers offering a range of different provision (different locations, venue types, models of delivery). The research found common themes amongst those people that were interviewed which are outlined in the next sections of this report. The inclusive cycling providers that were consulted are included in the appendix.

## **Findings**

The following sections consolidate the insight gathered from the perspectives of all that were interviewed in the course of this research, with the use of sample quotations throughout to help illustrate the points made, as well as some case study examples from participants.

## There is an unmet need in provision for active travel

A key finding from this research is that despite excellent provision of leisure cycling opportunities in a range of providers across the UK, there is a gap in the existing provision for enabling disabled people to cycle for transport purposes.

## Few organisations are currently intended or able to support utility cycling

As shown by the review of literature, the existing evidence base is focused mostly on cycling for leisure purposes, and there is little in the way of advice or guidance on developing cycling interventions to engage disabled people in cycling for active travel. This present research with inclusive cycling providers demonstrated a similar theme. Providers are predominantly engaging disabled people in cycling for leisure. Many interventions are providing opportunities for disabled people to access non-standard cycles to ride in traffic-free or low-traffic locations including parks, athletics tracks, and a variety of cycle paths. These sessions include a range of different delivery models – training, skills and confidence sessions; led rides; opportunities for people to use a cycle either independently or with a carer/member of staff in these locations. These programmes are having important and significant positive benefits for individuals, and providers running these types of session told numerous stories



of the positive impacts that they had witnessed, particularly in terms of health, wellbeing and social outcomes.

"We also have someone that comes along who's told that they would never walk again, and they've credited part of the reason why they can walk is because of the indirect physio that they're experiencing as a result of taking part in the cycling". (Inclusive Cycling Provider - Staff)

Few providers interviewed in this research, however, had any particular or concentrated focus on progressing individuals beyond the park or other location in which sessions were located, to take the next step into cycling for transport purposes. Reasons for this gap were, in several cases, simply that this is not part of their project aims, funding agreements and therefore not part of the provision being offered. Their interventions were designed to offer cycling opportunities within a specific location and utility cycling was not part of their remit. This does not mean to say that no participants went on to cycle for transport, but it was not a key objective of their delivery and not something that funders were requesting.

"...it is a social ride for some elderly people whose world has shrunk a bit because they're in care homes, and actually they really love it. I mean, we had a sing-song the other day, so it's part of it. Maybe we're not as much active travel, but we're more the social side and exercise and activity for people that couldn't do it by themselves". (Inclusive Cycling Provider – Staff)

In addition, some of the organisations did not have the funding to enable them to provide the range of cycles, the staffing or the insurance needed to cover the hire or loan of cycles to allow people to take their cycling further. Indeed, some smaller organisations reported difficulties in funding which meant their future to provide any services at all was uncertain. The aim of this research is not to diminish the value of existing leisure cycling opportunities. On the contrary, safe, enclosed locations to cycle are highly valuable for the health, wellbeing and social benefits they provide. Safe and supportive leisure cycling opportunities are also a crucial step on journeys towards utility cycling for disabled and non-disabled people. The aim here is to identify the gap in provision and best practice to understand how this could be met.

In a few settings, staff suggested that the people they catered for did not want to cycle for travel, were happy with leisure cycling and had no desire to take their cycling further, or that the people supported may not be able to cycle for transport due to their specific needs. It wasn't clear, however, whether this was something that providers had asked their participants.



"There are odd examples of people that do [cycle] for transport but most of our participants just want to cycle for leisure, fresh air, some exercise, they aren't looking for this as a mode of transport". (Inclusive Cycling Provider – Staff)

Other providers and partners did report interest from participants in cycling for transport. However, they identified that supporting disabled people towards cycling independently or for transport was challenging due to a wide range of barriers – which further highlights why support would be potentially needed.

"This gap in terms of transition to transport or cycling independently... this is the hardest transition to make, this is an unmet need". (Cycling Organisation)

Certainly, there will be disabled people who are either not in a position to cycle for transport or who do not wish to do so, and who are gaining positive outcomes from leisure cycling. For some individuals, however, it may be that the offer is not available to them. A lack of provision for and awareness of disability utility cycling may mean that some disabled people do not realise that cycling for transport could be an option for them. One interviewee identified that this could be a gap on the side of professionals who work with disabled people, not of the disabled people themselves.

"Very few health or exercise professionals know that cycling is an option for disabled people". (Cycling Organisation)

Indeed, whilst the literature review found that there are a range of barriers to cycling mentioned by disabled people, some of the key barriers relate to either the perceptions of cycling for disabled people (for example, Sustrans and Arup, 2020, found 23% of disabled people think cycling is not for people like them), or a lack of opportunity to cycle in terms of a lack of access to suitable cycles (cycles being too expensive and there not being enough opportunities to hire cycles); and a lack of cycling skills and confidence plus a lack of adult sessions to help people to improve their skills and confidence (Transport for All, 2023). This suggests that addressing some of these barriers may help some disabled people to see cycling as a potential option.

## Some disabled people are interested in cycling for transport

Evidence from the ICE programme and others indicates that at least for some disabled people, there is interest in cycling for transport. This came from both disabled people who had previously cycled and from people that had not cycled before. One participant had cycled to work for many years, but changes to her mobility had made using a standard cycle more difficult. She had been wanting to continue cycling before hearing about the ICE programme, but had



been unsure what cycle would be most appropriate for her needs, or how to find out information on the options available.

"I wondered, is there a cycle out there that better meets my changing needs? This was an opportunity to look into this". (ICE Participant)

Another participant who was previously a regular leisure and utility cyclist had thought, due to his declining health, that he would never be able to cycle again.

"I thought it [the ICE programme] was fantastic because I was going to get an opportunity to get back on the bike again". (ICE Participant)

One inclusive cycling provider reported that parents of disabled children were often interested in cycling opportunities for their children.

"We notice that there is lots of interest from parents, they want their children to be able to cycle to ensure that they have independence". (Inclusive Cycling Provider – Staff)

Another provider identified the extra challenges presented by supporting people to cycle on roads, but also that there was demand for it and that as a provider, they could have a crucial role to play.

"When people want to go wider than the park, that is when the barriers kick in. But our role is to help them navigate the barriers". (Inclusive Cycling Provider – Staff)

Cycling UK's ICE programme was initiated with the aim to fill this gap in provision for disabled people interested in cycling for transport. The following sections outline the learning from the ICE programme as well as from the interviews with all others spoken to in the course of this research, including deliverers of both leisure cycling interventions and those that have been involved in supporting for active travel.

## Delivering cycling for active travel

Despite fewer organisations explicitly offering active travel support, there was still valuable insight and learning uncovered. This section outlines the ways in which providers were supporting disabled people to cycle for active travel and offers best practice suggestions around how inclusive cycling providers can support and engage people to access cycling for transport and make this a part of their provision. For individuals, some aspects here will be more important than



others, dependent upon individual barriers and needs, but in general these can be seen as a pathway towards enabling people to cycle for transport.

#### Inspiring and encouraging people to consider active travel

Raising the profile of cycling as an active travel option for disabled people will clearly help to change perceptions that disabled people cannot cycle for transport. It was suggested that marketing materials should contain images of different people cycling (different disabilities, ages, genders, for example) and using different types of cycle, as well as cycling on different terrains including on roads and cycle paths, showing that this can be an option.

"People need to be able to see others like them doing this, to think 'I might be able to do that too'. It is inspirational". (Inclusive Cycling Provider – Staff)

Some of the ICE participants commented that when they were out on the cycles, they would attract some attention. People would approach them and were interested. They would be asked about the cycle itself – what it was, where it had come from, how it worked, and people would ask where they themselves could try this type of cycle. It was commented that seeing someone else on the cycle is "... often the best method of promotion" (ICE Participant). The participants suggested that having some leaflets on the back of the cycles would be a good idea so that these can be given out to people in these situations. These examples show that raising awareness amongst disabled people of the cycling options available to them is important.

"It was the first spark in my husband's eyes that I had seen for years when this was spoken about... You know, the first time he went, he could do 10 minutes. He's now up to over an hour, twice a week on a bike". (ICE Participant's Family Member)

It may be that wider perceptions on disabled people cycling also need to be addressed. Raising awareness of inclusive cycling interventions which support and engage people in active travel, how these can work in practice, as well as the positive outcomes that this can have, is important.

## Appropriate cycle availability and flexibility

Having a range of suitable cycles that allow individuals to explore a setup that will work for them in a utility cycling environment is also an important element. Having staff and volunteers that have knowledge of different cycles and the different adaptations that are possible is important to be able to support people to try different cycles and to adapt cycles to meet the needs of individuals. Several deliverers commented that people were often not aware that the range of cycles existed or had made assumptions about their ability to ride certain



models. Staff needed to be able to support and encourage people to try different adaptations.

"I think just getting people to know that there are different kinds of bikes available and different adaptations. Not many people know that there's so many different trikes and adapted bikes that are available. And again, sometimes people put barriers up themselves. So, some people, as I say, will be like, 'well, I can't ride a two-wheeler. I've had this accident' or 'it doesn't work' and it's like, 'well, no, but you could try this', or 'this one might work for you', or 'what about this'". (Inclusive Cycling Provider – Staff)

"There's a lot of people that say things like, 'oh, I can't ride a bike because I can't get my leg up over the saddle'. 'Well, lie the bike down and then you just step over the frame and you pick the bike up' and they'll be like, 'oh, I never thought of that'". (Inclusive Cycling Provider – Staff)

One participant in the ICE programme had previously cycled for many years but after being diagnosed with Parkinson's disease began to struggle with her balance on a two-wheeled standard cycle. She had started to think that cycling was no longer going to be a safe option for her when she was told about ICE by a friend who was participating in the programme. She had not previously considered the option of a non-standard cycle and was not aware of the different models available or whether this could be an option for her needs. She was supported by the delivery team to try a few different cycles to find the most suitable model which she then took out on loan. The delivery team provided advice on different options for where to buy a trike and she has since purchased a trike which is enabling her to continue cycling for local journeys.

"I thought it that was gonna be the end of my cycling and it's not. It's opened up new opportunities for me." (ICE Participant)

As in this example, being able to test a range of options may be vital. In other situations, progressing through a number of cycles may be more about building confidence to be able to ride cycles that they initially may have not thought possible.

"When people come in, we tend to start them off with something social, like a side-by-side tandem. It depends. It's a case of size them to the type of bike. Depending on needs, we might start with tandem, build them up and then once they've built the confidence, you move them on to an individual bike, we see if we can move them through the fleet. We just try and keep a record and we try and keep an option on it and look at it. So



basically our objective is to enable them to be as independent and as empowered as possible". (Inclusive Cycling Provider – Staff)

For those considering active travel, it will usually be the case that a smaller cycle or one closer in style to a standard two-wheel will be more amenable to use for transport, as so much of the public domain is not designed with non-standard cycle needs in mind. Furthermore, the cost of different styles of cycle varies significantly. For this reason, encouraging people to develop confidence and try out different models, building their confidence on a cycle that may be more flexible to use on infrastructure, easier to store or less expensive to purchase is an important element in making active travel viable for more disabled people.

"Trying out a bike to see what works for you and then speak to people to find out what adaptations can be made. I always compare it to kind of a two-wheeler so or everyone who buys a two-wheeler - they don't always keep it as it came out the shop, they make their own adaptations to it so they might like different pedals on it or if it's a mountain bike they might put a dropper post on it or if it's a commuter bike they might put mud guards or a basket, so it's about trying out bikes, and making it work for them, not just putting up with something that doesn't feel right". (Inclusive Cycling Provider – Staff)

The expense of non-standard cycles is a significant barrier to ownership. Solutions to reduce costs of purchase were beyond the scope of this research, but for those who were in a position to consider purchasing, many providers and participants emphasised the importance of being able to try the cycles out first. In addition, funding to help inclusive cycling providers to be able to expand their provision is also a stepping stone to increase the opportunities available for people. Some of the providers reported that they did not have the funding to be able to provide the range of cycles, or the number of cycles to enable people to take out loans. Some smaller organisations reported that because they do not have the range of cycles that they would like, they cannot always meet the demand for different cycles. This meant that sometimes they did not have the right cycle or the right equipment to make the necessary adaptations for individuals, or that they had more than one person wanting to use the same cycle, meaning there were queues or waiting lists at busy times.

"It can be a bit tricky making sure that there are the right bikes at the session for the right people. You know, the people that say that they want to come, 'have we got the right bikes for those people, is there going to be enough of the right bike to accommodate everyone?'" (Inclusive Cycling Provider – Staff)



### Providing loans to use out and about

Having the opportunity to try out a range of cycles and work with different adaptations within a hub setting was important, but then having an opportunity to loan a cycle and try it out using local infrastructure was also valuable for many people to be able to take their cycling to the next level. Testing and being able to use the cycle in the areas in which people would want to use them on a regular basis (close to home, to and from the shops, to work, and so on) was often crucial to see if the cycle was going to be practical, comfortable and easy to use.

"It was really valuable for me being able to bring it home on loan for a couple of weeks because then, you know, that that enabled me to be sure that it could cope with the terrain that I wanted to take it on". (ICE Participant)

Learning appropriate local routes is explored more in later sections, but providers were clear that, as the participant above says, knowing that the cycle would suit the locations and integrate into a person's life was a valuable stage in the process of considering how and whether cycling would incorporate into a person's life.

"You're only going to ride a bike if it feels right and if it's comfortable for you, and it takes time to know if it is the right bike for you". (Inclusive Cycling Provider – Staff)

"Don't buy the bike without trying it. I've heard so many stories of people buying a trike online and then they've got it home and it's absolutely not what they expected and it's not right for them. So don't buy a bike without trying it out. I think there needs to be more places like [our cycle centre] where people can go and try different trikes and different adapted bikes". (Inclusive Cycling Provider – Staff)

Being able to provide a full range of cycles for loans is difficult, however, particularly for smaller providers, or those restricted by financial limitations, due to cost and storage issues.

## Finding storage solutions

Difficulties in storage of cycles was a challenge for people to take out loans of cycles as well as purchase their own. Providers identified that newer models, whilst being more expensive, are often more lightweight, whereas older equipment and cycles could be heavier and more difficult to manoeuvre. The size and manoeuvrability of some cycles meant it can be difficult or impossible for some people to store them securely at home, and some people have difficulties transporting cycles from the hub to their homes.



"And if somebody does want to borrow a trike, how are they going to get it home and where are they going to store it? You can't just put it in the shed". (Inclusive Cycling Provider – Staff)

The effort required to find storage solutions was seen as a potential reason to put people off considering loans for one interviewee – especially when combined with the cost barrier to purchasing a non-standard cycle.

"Not a lot of people can afford to buy that bike after the loan, so I think that might potentially put people off [a loan] from the start thinking 'well, I can only borrow a bike for a couple of months. Is it worth me pursuing this? Going down the route of sorting storage for it or potentially having to insure it'". (Cycling Organisation)

The ICE delivery team manage these issues by identifying key skills, information and advice that can help navigate storage challenges. The team gave participants the chance to test out moving and lifting cycles in and out of a car, showing them correct and safe ways to fold and lift cycles to be able to think about storage and access.

"And the thing I found very important was literally being hands on because [the delivery staff] folded right down and I could check whether I could actually lift it. Just simple things like that because it's very easy to get into. It's like 'alright, but if you can't actually manoeuvre it when you're not cycling, there's no point'. So it was really great to be able to try all those aspects of it". (ICE Participant)

The opportunities for loaning cycles helped some participants to view any investment in storage as less of a barrier to cycling than it had initially appeared because the benefits of cycling began to outweigh any risks. One ICE participant had viewed storage initially as a barrier to owning a non-standard cycle. After taking out a loan and keeping the cycle in her conservatory temporarily, the opportunity to try out a cycle on a longer-term basis and feel the health and wellbeing benefits of cycling had made her believe that investment in both her own cycle and extra storage at home would be worthwhile.

"... the only thing that is an issue was the storage potentially but you know thankfully we had the conservatory ... but other than that was absolutely fine. But this is it, you just adapt, don't you? ... You'd have to get somewhere, a storage unit, a garage or something that you could then go to, to get it out. So, I'm now looking at the space I do have". (ICE Participant)



The ICE programme has adapted their loan service based on feedback from participants to provide a storage solution by offering day-long loans. Initially the plan was for loans to be offered on a longer-term basis for one week or more. There are some examples of participants for whom this worked well, such as the participant mentioned above. However, the difficulties that some participants were having with storage meant that loans were not a possibility for everyone that was interested in the programme. The team has trialled a service where loans are available for shorter periods measured in hours, meaning that someone could collect a cycle and use it for a half or full day to undertake local journeys, and then return the cycle. This allows access to loans for those who do not have storage space available. This has resulted in more loans being taken out and repeat participants who attend regularly to take out shorter loans. One participant has been taking out regular short-term loans to use for local journeys as a mode of transport.

"The storage like for myself, you know, I'm a wheelchair user, and I don't have a place to store a bike that size. So having those sessions that I can just, local sessions that are not far away from where I stay, it's for me, works brilliantly because I can just let you guys know, come in, use the bikes how long as I want and just go back home. That works for me". (ICE Participant)

Where people are in a position to be able to purchase a cycle, staff on the ICE project also provide advice on storage solutions, pointing people in the right direction for purchase of different storage and security options.

## Building skills and confidence to take a loan

One provider reported that people often initially seemed interested in taking out a loan, but did not always then go through with the loan after their initial enquiry.

"We find sessions really popular. We find that people are interested in loans and ask us about it but then get a certain way along and then change their mind. For some it is storage, for others it seems to be confidence or nerves". (Inclusive Cycling Provider – Staff)

Building cycle skills and confidence either through one-to-one sessions, group sessions or led rides was an important part of provision as part of a pathway towards cycling independently for travel. It also creates demand for active travel as people grow in confidence. Whether in groups or individually, some locations offered formal training sessions, for example in road safety. However, mostly providers were flexible to the needs and interests of individuals, even where they had specific training goals in mind.

"Our training... We break it down for the individual. Lots of people come and want to build their confidence. It is not prescriptive. It is not always



possible to run a prescriptive course therefore we tailor it to the individual, it is broad and widely encompassing." (Inclusive Cycling Provider – Staff)

"So you'd take them on a short ride on one kind of bike. And if you recognise that, obviously they've got road sense, not on the road, but on pathways, you know, and other people coming towards you and balance. And you can say, 'OK, slow down now'. And if they don't brake in time, you know, then you have to come back and step back a little bit further even. But generally, once they realise that they can ride a bike again and that there is someone who's keeping an eye on them and then they go from strength to strength". (Inclusive Cycling Provider - Volunteer)

Sessions offered through the ICE programme are tailored to the needs and wants of the individual, and session plans created with steps for progression to support people, for example, from sessions held indoors to develop an individual's confidence to move outdoors to a traffic-free environment, and eventually to transition to areas with traffic. The participants commented on the flexibility of sessions to meet their needs and to help them grow in confidence. They identified provision of hands-on support in terms of adaptations, adjustments and settings on the cycles, advice on other cycles they had not previously considered that could meet their needs, and the opportunity to test out the cycles and then build their confidence gradually as valuable components. Several participants made comments about feeling like the team always allowed plenty of time to ensure that they felt comfortable and confident and that they never felt rushed.

Group sessions and led rides enabled people to learn from their peers too in an informal way. This could include talking about and gaining advice on purchasing cycles (types of cycles and where to buy them), how to maintain cycles, and to learn about local routes and route planning. Allowing space and time for people to chat and learn from their peers was seen as important.

"I think that's [peer support and learning] important with adapted bikes as well. But there's not really that space to do that always. So like a regular, if you've got a two-wheeler, like we do a lot of two-wheeler bike rides and led rides, and people will share their experiences and stories of bikes, of rides they've been on, hints and tips, but there's not as many opportunities to do that for those riding adapted bikes". (Inclusive Cycling Provider – Staff)

Providers discussed how led rides and being in a group gave people the confidence needed before potentially venturing out alone.



"[Many people] haven't got the confidence without someone to say, 'OK, you've got a puncture, we'll all settle down here. We'll sort the puncture out and then we'll just carry on our way'. It's not a big issue, you know, but to someone trying to do it on their own, it is a big issue, you know. Doing it in a group, that support is there. And then the other thing of course, is if somebody is gonna be poorly or isn't feeling particularly well halfway through the ride, then there's ride leaders and buddies that can look after them. So there's that confidence that comes with an organised ride". (Inclusive Cycling Provider - Volunteer)

Another suggestion was that some participants can benefit from cycle maintenance sessions or training which would help with confidence around the purchase of cycles as some people were reported as being nervous about owning their own cycle for they did not know how to look after it themselves. As noted in one of the quotes above, many of these confidence building needs on the pathway to utility cycling are identical as for those using standard cycles and non-disabled people. However, there is not always the same provision of these opportunities for those with non-standard cycles or disabled people.

#### Supporting with local routes and infrastructure

The review of literature found many sources describing a lack of accessible or safe infrastructure as a major barrier to cycling for disabled people (for example, Transport for All, 2023; Wheels for Wellbeing, 2021). This was reflected in the experience of providers and participants, alongside suggestions for how to mitigate the issue. "How to translate into everyday life" was described by one cycling organisation as crucial. Helping people with route planning, creating routes, and working with people to identify routes that work for them were seen as key to helping people to be able to identify ways in which they could cycle for everyday journeys. As many sessions were held in relatively traffic-free locations such as local parks, advising and supporting people with routes beyond the park, and the routes on which they would potentially be regularly travelling, was important. This might be advice on accessible infrastructure, safe routes, as well as the quickest or most scenic routes.

"Providing things like accessible route maps or information, or scoping routes can be very useful especially in helping them with infrastructure barriers". (Inclusive Cycling Provider – Staff)

"We can also give some advice on local routes. Infrastructure is a barrier, although progression is being made, and we can advise on what some of the local infrastructure barriers are and suggest routes". (Inclusive Cycling Provider – Staff)



In areas where there were safe and accessible cycle paths already in place, providing knowledge of these and helping people to plan routes which make use of the safe infrastructure was important.

"And so many people say to us 'I don't cycle because I don't want to go on the roads'. Right. 'You don't have to'. There's so many cycle paths around. So again, we help people to get to know the cycle paths, to know where those safe spaces are". (Inclusive Cycling Provider – Staff)

Offering buddy rides and travel support on a one-to-one basis is an important part of the delivery of the ICE programme. This includes support with planning routes from individual's homes, workplaces and other key locations, with the delivery team making these journeys alongside individual participants. Advice and guidance on road safety, and aspects such as negotiating junctions and positioning on the road are provided as well as ensuring individuals have opportunities to ask questions and feel comfortable and confident to make these journeys alone in the future. Some of the ICE participants also suggested that they would like to take some led rides as a group in new locations. As well as having positive social outcomes for the cyclists, they felt that this would give them greater confidence in cycling in a range of different places.

"Because just now you're very safe where you're cycling because it's flat and the traffic's not heavy and it's, you know, it's safe. So, for me my anxiety is if you want to go out on the road because it's like cycle paths, just now and it's like, oh, I've done a bit. I know I have, but it's been a quiet road. Do you know what I mean? For me, getting that kind of confidence to cycle in different areas". (ICE Participant)

## Providing knowledge and advice on purchasing cycles

Once participants have tried the cycles, taken out a loan and developed their skills and confidence, some will go on to purchase their own cycle. Being able to offer advice on the purchase of cycles or to point people in the right direction for more information is important. Some providers had made links with local shops or could recommend online or in-person providers, with information about prices, offers and service.

"We have a lot of people who come for the first few weeks and they're borrowing our bikes and then we might show them, 'oh well, there's [name of cycle shop]. You can get a refurbished bike from there'. Or they'll maybe speak to people within the group and find out where they got their bikes. And sometimes they get a new bike or they'll get a second hand one, but then they go on to get their own bike with the adapted bikes". (Inclusive Cycling Provider – Staff)



As noted previously, this does not overcome the issue of the high cost for non-standard cycles. However, for those who are in a position to consider purchase then having trusted sources of information on how to take the next steps was valuable.

#### Training for those supporting disabled people

One interviewee suggested that offering training or support for carers, support workers or the families of disabled people would help them to more confidently support the people that they care for, particularly in terms of helping with adjustments and being able to assist with some basic maintenance skills.

"Maybe if there was something geared towards the support staff and the carers to make them more confident on how to use the bikes, how to charge the batteries, how to store them, how to adjust the seats and things like that. And get them confident before having one of their individuals in the scene. You know, having an able-bodied person there so that they could just focus on the actual cycling as opposed to focusing on the person that they're supporting as well". (Disability Organisation)

They acknowledged however that there is an issue of the high turnover of support staff in some cases, for example in care homes, meaning that this training would need to be regular or almost ongoing. However, offering some training or guidance for family members could be a more practical and longer-term option. Within the ICE programme, inviting family members to try cycles alongside the person they care for, offering them the chance to be involved, overcome potential fears of how safe or stable the cycles would feel and experience the joy and exhilaration of being on a cycle if it was something that they were also not used to was included within activities.

## Summary – delivering cycling for active travel

The research has shown that there are important ways in which some inclusive cycling providers are supporting disabled people to access cycling for active travel. The examples in this section indicate some best practice suggestions, with evidence from interventions including the ICE programme demonstrating how this is successfully working in practice. The key best practice recommendations are as follows:

• Inspiring and encouraging people to consider cycling for active travel: raising the profile of cycling as an active travel option through raising awareness of cycling interventions; communicating evidence of the positive impact of cycling for disabled people; and increasing funding to expand provision.



- Appropriate cycle availability and flexibility: demonstrating the range of different cycles and adaptations that are possible; and staff being knowledgeable about different models and adaptations.
- **Providing loans to use out and about:** providing opportunities for people to try out cycles on the roads and cycle paths in which they would be using them to ensure the cycle is practical and comfortable.
- Finding storage solutions: overcoming storage barriers by supporting people to learn how to move and lift cycles; providing advice on storage solutions; and considering shorter term day loans for those that cannot store overnight.
- Building skills and confidence to take a loan: offering skills and confidence sessions tailored to individual needs, with steps to enable progression to active travel; allowing space and time for informal learning amongst peers; and providing basic maintenance training.
- Supporting with local routes and infrastructure: helping with route planning; and providing led rides in new locations to increase confidence in cycling in a range of different places.
- Providing knowledge and advice on purchasing cycles: offering advice on the purchase of cycles and having links with local providers where possible.
- Training for those supporting disabled people: offering training or support for carers, support workers or families to enable them to support with adjustments and be able to assist with some basic maintenance skills.

## **Delivering cycling interventions**

The research also captured a wide range of further learning around the delivery of cycling interventions for disabled people, relevant to delivering leisure opportunities as well as those oriented to supporting active travel. The literature review highlighted the need for spending time, in advance of setting up any intervention, doing groundwork, and developing a full understanding of the needs of the people in which the intervention is targeting. This included understanding the barriers and enablers to cycling for disabled people and effectively consulting with people on how best to design and deliver the activity to meet their needs, wants and interests. This also included developing an understanding of wider factors that will impact upon participation. This research similarly showed the importance of planning and designing appropriate sessions to meet the needs of the audience and the following sections highlight some of the key best practice themes that were highlighted around these areas.

## Providing inclusive sessions

The evidence gathered from the review of literature suggested that inclusive sessions which cater for all are likely to be more popular than sessions catering



only for specific group(s) of disabled people. The research also confirmed that this was mostly the case. Some providers had offered disability specific cycling sessions. In some circumstances this has worked, particularly if the session catered for a community group that were brought to the session by carers or by a local charity or care home, and the session catered for the group as a whole. However, for other providers when advertising sessions they found that broader, inclusive sessions were more popular.

"We tried it and no, it really didn't work. We just didn't get the uptake for the disability specific sessions like we have for the public sessions. Lots of people don't want to define themselves in that way so don't want a specific session". (Inclusive Cycling Provider – Staff)

"Other people would come over saying 'this looks great, I would love to have a go'. You don't want to be saying 'no' to people, 'oh no, you can't do it today because you don't have the same impairment. Come back another time'. That could really put them off". (Inclusive Cycling Provider – Staff)

Participants on the ICE programme also talked about the need for programmes that are inclusive and open to all.

"I guess when you become disabled, people sort of, you know, they suddenly think that you want to be wrapped in cotton wool. And there was absolutely none of that with [the delivery staff]. It was just like, go as fast as you want but make sure you stay safe. It was exactly what it says on the tin, it felt inclusive". (ICE Participant)

## **Understanding needs**

The literature showed that it is less important for deliverers to understand the specifics of the disability and / or health condition(s), but more important to understand what barriers people face and how these can be overcome. Whilst it may not be possible in the short term to change some barriers (for example, infrastructure), understanding the ways in which these barriers impact upon individuals, and what changes are realistically possible to help people to consider cycling as an option is important. Indeed, the research has shown the importance of taking time to understand the needs of the participants and what can be done to make cycling accessible for them. In particular, the focus of many providers was on what people are able to do, rather than any limitations.

"I think people put limitations on themselves, they say, 'oh, well, I can't move this arm. And I can't do this. And I can't do that'. Like, doesn't matter what you can't do. Let's come down and see what you can do". (Inclusive Cycling Provider – Staff)



"Shifting that focus to what people can do rather than what they can't. 'Come down, try out the bikes and you will be surprised what you are able to do'". (Inclusive Cycling Provider – Staff)

This approach to delivery is consistent with the 'social model of disability', a theoretical approach which presents people as disabled by barriers in society, not by their impairment or difference (outlined, for example, in the work of Oliver, 1996). This approach focuses on the removal of barriers to accessibility and improving equality and inclusion within society. This is in contrast to the 'medical model of disability' in which individuals are described as being disabled by their impairments or differences, often placing low expectations on disabled people and leading to a loss of independence. Instead, it is more important to understand the factors which prevent disabled people from taking part in cycling and what can be done about these. A person-centred approach is where sessions are tailored to individual needs and the team are flexible to the needs and interests of the participants. Participants commented on how much they valued this approach.

'[The delivery staff] are so welcoming and I felt really listened to. You know when I first went there and said, 'well, look this, this is the difficulty that I'm having. This is what I'd like to do'. And yeah, they just really listened and then their knowledge of what they had was really handy as well". (ICE Participant)

For most providers, the first step was for individuals to come along to a session to meet the staff and volunteers and discuss their needs and see what options were available to them. Staff explore their specific access needs to be able to make suggestions as to what cycles and adaptations might work best for them.

"So they come down with their carer and we chat to them, make sure that we know everything that we need to know about their, their abilities and disabilities. We don't want to cause any further injury and we don't want to end up with people losing confidence in what they're trying to do. So you have to be very careful". (Inclusive Cycling Provider – Staff)

The feedback from the ICE programme also was that it takes time to meet and talk with people, understand their needs, and to work out which cycle might suit someone and what adaptations might be needed. The team asked questions to be able to be able to identify what would be suitable.

"... to unlock that bit of knowledge to be able to identify the key to what works for that person". (ICE Programme Staff)



#### Gathering feedback

The literature review highlighted the importance of working with participants themselves to develop and design sessions that work for them and gather their feedback. The ICE participants commented on how they felt both valued and listened to when being asked for their feedback on the programme and when invited to be involved in the focus group sessions.

However, one provider noted that not all disabled people might necessarily want to be involved in designing sessions, suggesting that it is important to include people in feedback sessions or user groups where they want to be involved, but not to assume that everyone will want to be part of this.

"... they might just want to show up and use the facilities the same way that non-disabled people do, so it's about getting the balance right". (Cycling Organisation)

### Effective communication and managing expectations

Taking steps to understand and consult with the audience will help to highlight the most appropriate methods of communication and engagement. The research with both participants and providers suggests that having a range of options for how to contact providers, including telephone, online, email, or via message, is important. Some people will prefer certain methods, and this could make the difference between them getting in touch or not.

"Making that feel less daunting as well, kind of the getting in touch side and yeah, finding out without necessarily having to speak to somebody if that is something you aren't comfortable with, but to be able to digest that information". (Disability Organisation)

There were several comments that people can be nervous when going to sessions, especially if they are new to cycling or have never ridden a non-standard cycle before. There is therefore a need to provide as much information as possible so that participants are fully informed about what the session involves ahead of time.

"There can be anxiety, a fear of what it will involve. So if they have all the information – what the session involves, what they will be doing, how long for, where it is, who they will be meeting, who will be running the session, and so on, that all would help". (Disability Organisation)

One provider produced an information sheet which was sent to people before their first session, outlining some of the answers to key questions that people might have, for example what to expect and what to wear. Others had this information on their website. Some projects provided opportunities for taster



sessions, to come and observe or meet deliverers in advance. As with the suggestions above around having a range of options of how to make contact, providing flexibility with the information in a variety of formats may also be important.

It was noted by delivery staff that it was sometimes necessary to manage people's expectations in terms of how long it would take to start cycling. Staff needed time to work out the right cycle or the right adaptations which meant that sometimes on the first session someone might not get a chance to ride. This was particularly the case if certain parts needed ordering to enable someone to cycle.

"You might not be able to ride today, it might be that it takes an hour just to work out which cycle. Then they might need to come back to be able to actually ride". (ICE Programme Staff)

"It can be a difficult job, sort of recognising what may suit people and helping make adjustments when needed, and managing people's expectations. If they think they might be able to use one bike then they come down and it just isn't suitable for them. So you need to suggest something else but they really wanted to use that other one. You have to be careful. Because you don't want to knock their confidence and make them not want to come back. So you have to make suggestions, look at what else could work, explain that they might find something else easier and more comfortable, encourage them to try a few things. It's a fine balance, really, between inclusion and their wants and needs as well". (Inclusive Cycling Provider – Staff)

Providing detailed advance information helped to manage these types of expectations. In addition, making it simple and easy to book sessions and to get all the information needed is important, as well as this not being too time consuming. Having complicated systems for booking was reported as offputting.

## Promotion and visibility

In areas where sessions took place in public places, some of the more well-established centres found they did not need to do much direct advertising. Delivering in a park meant that word of mouth or people seeing the sessions taking place worked as a form of advertising.

"It is just normalised – it's part of the park seeing people cycling round on these cycles. It is accepted here. Helps the image of disabled people cycling become seen as something normal". (Inclusive Cycling Provider – Staff)



In one session observed as part of data collection, two people that were walking through the park came over and asked if they could give the cycles a try. However, more private or secluded provision had benefits for some participants. On the ICE programme in Manchester, an indoor space used in winter was preferred by some participants as they did not want distractions of other people watching them or being close by whilst they were learning, or whilst transferring in and out of the cycles.

In terms of language and advertising, one participant had clear views. They felt that the most appropriate messaging and language to use when promoting inclusive cycling was that this is suitable for everyone, it is simply a different type of cycle from what people see as the standard two-wheeled cycle.

"It's just getting that positive message across the people that it's for everybody basically...It's a natural progression, you know, even if you know nothing. It's nothing to kind of think or it's massively different from everyone else. It's just a natural progression that everybody's going to come across at some point sooner or later, you know". (ICE Participant)

#### Ensuring accessibility of sessions and facilities

The review of literature highlighted how important the accessibility of the location is for disabled people, as well as having a range of accessible facilities on-site. This was also an important finding from the research. Parking, easy to find venues, and having toilets or changing areas that were accessible as well as easy to find or well signposted were all considerations.

"Because you have to as a support worker, you've got to think of absolutely everything. It's not as easy as, 'oh, come on, we'll just jump in the car and we'll go here'. There's usually lots and lots of things that you have to consider depending on who you're taking. Whether that's where we're going to park. 'Is it going to be busy? Is there going to be something that stresses that person out? Is it going to be too bright? Is it going to be too noisy?"" (Disability Organisation)

Feedback from participants on the ICE programme also stressed that accessible and easy to find locations are important and recommended having information readily available on directions as well as on facilities available.

"I guess maybe it's like almost pre-empting stuff that people with different access needs might want or might find useful." (ICE Participant)

## Offering year-round provision

As many inclusive cycling sessions deliver outside, some do not run throughout the winter months. Some centres close between around November and March/



April. Some organisations reported that there was not the level of demand for provision throughout the winter. Recruiting volunteers to work outside could also be more difficult. However, other providers found that people did want to cycle year-round, even outdoors. Assessing the level of demand and codesigning delivery with participants on what they would prefer provided some solutions for this. Having indoor alternatives for winter can enable provision throughout bad weather, as was done on the ICE programme in Manchester. For another provider, the social side of attending sessions was so important to some participants that if the weather prevented them from cycling on a particular day, they offered a walk or a trip to a café as an alternative.

"But one of the things is we do keep our activities going over the winter time as well. So everyone keeps saying, 'oh, it must be really quiet time for you just now' we're like, 'no, we're still really busy' ... And then if the weather really does hamper us like when it's like a blown us sideways gale, we'll actually sometimes meet up for a coffee social or if it's icy, one of the groups went for a walk. Just we know a lot of people come for that social activity as well. It's not just about cycling". (Inclusive Cycling Provider – Staff)

#### Providing social time

For some participants, the social side of attending sessions is just as important as the cycling.

"It is an age old tested model, bike ride with friends, and social time in a pub or café at the end". (Inclusive Cycling Provider – Staff)

In particular, when social isolation is a more common issue for disabled people than non-disabled people (ONS, 2022), inclusive centre users identified this benefit. The family member of one of the participants attending the ICE programme reported how important the social side of sessions was:

"For me, it's not just the physical stuff for him, it's the meeting other people and socialising outside of the house, because otherwise he would only see me. You know, so I think him getting out and meeting other people and speaking to other people, yes, has been very good for him as well". (ICE Participant's Family Member)

Some sessions were held in locations where there was a café either onsite or close by, and people would congregate in the café before or after sessions. One session that was observed had some hot drink making facilities in their hub and could make the participants and carers a drink. During the session, one participant arrived with his carer. He was a regular participant that had been attending for many years, and for whom the sessions were an important part of



his weekly routine. He enjoyed a cup of tea before going out with his carer on one of the cycles, and the team had made a personalised mug for him with his name and a photograph of him cycling. The social time on arrival whilst having a drink and talking to the staff and volunteers was an integral part of his experience.

"It's not just about the cycles, it's about everything else that goes with that for individuals come into sessions, they're not just going round a track. They're meeting other like-minded people or individuals that are, you know, peers, and they're able to see, is there somebody like me at that session, you know". (Inclusive Cycling Provider - Volunteer)

The social time was also important respite for carers and family members too.

"And for the carers as well, especially if carers are parents, because it can be fairly isolating. So it's a chance for them to meet up as well". (Inclusive Cycling Provider – Staff)

One group found that even when people did go on to buy their own cycle and cycle independently, they still returned to attend led rides particularly for the social side.

"We've had lots come through us, get the confidence, get the skills, carry on and then maybe get their own and do their own thing. But for many they continue to ride with us too. I think they enjoyed so much and it's so much easier to just come in and pay, what, a fiver for a bike ride with a group of like-minded people". (Inclusive Cycling Provider - Staff)

Indeed, several of the participants on the ICE programme that were either regularly taking out loans to cycle for travel or who had since purchased their own cycle reported that they would like the offer of more led rides, to be able to cycle with others and enjoy some social time. There were suggestions made about locations in which they would like to take a led ride as a group and including time for a picnic.

## Employing the right staff and volunteers

The review of literature highlighted the need to give particular consideration to those that are delivering sessions, in terms of their skills, qualities, knowledge and training. The research findings in this area focus on the interpersonal skills that were important for staff and volunteers. The ICE team described essential qualities of staff as being active listening; not assuming what someone's barrier is; patience; and problem solving. Having staff who have excellent 'soft people skills' was described as crucial by many of the people interviewed in the course of this research.



"[the delivery staff] were both amazing and like an important part of the experience. I think in terms of making me feel, you know, comfortable and just being really open to stuff. And, you know, things not being, not feeling rushed especially was really helpful" (ICE Participant)

"But with the team. They're just good with the people, they're good at dealing with them. And that's I think that's probably the most important thing, isn't it?... they're certainly very natural at dealing with whatever is thrown at them in general". (Inclusive Cycling Provider -Volunteer)

Consistency of staffing was also regarded as important – people often wanted to see familiar people when they attended sessions.

"I'm here to help support and encourage – greet people, be a friendly face. Just having lots of friendly and regular faces – they want to see the same people". (Inclusive Cycling Provider – Volunteer)

Remembering the participants was also highlighted – knowing their names, and being able to remember their specific needs, their preference of cycle and so on to allow for a personalised approach.

"And [the delivery staff] are so good and they remember the students and they use their names, and all that kind of thing is so important too".

(Disability Organisation)

"Social side is just as important to people and the volunteers support with that. You get to know them, and you worry about them if they aren't there. There was one participant that came for a long time and had been in hospital last year, I hadn't seen him for a while, so you just hope they are ok". (Inclusive Cycling Provider - Volunteer)

Ultimately, having staff and volunteers who are enthusiastic about the benefits of cycling for disabled people and who find their role rewarding is important. The research found many examples of both staff and volunteers who were passionate about the positive outcomes for participants and who gained a sense of value from their own role in supporting others.

"It's a lovely job ... you feel it's a blessing to have a job like this". (Inclusive Cycling Provider – Staff)

"So what keeps it going is there's a lot of people committed to making it work. The volunteers turn up even at the depths of winter cold freezing days". (Inclusive Cycling Provider – Staff)



"It's magical. Whenever you see people who are reliant on wheelchairs or who can't push a manual wheelchair and or may arrive using two walking sticks. And whenever you see them, people might think 'I don't know how they're going to be able to access this service when they don't have the upper body strength or the mobility to propel themselves'. And then you see that individual getting onto the track and they're off. They're off like lightning because they are supported through the structure of the trike, where they just need to build the momentum in their lower body strength. And because of the way the trikes are adapted, they just need minimal movement in their upper body strength. Then it's just, it's just magical to see". (Disability Organisation)

The research found that, whilst there were several mentions of staff training, including road safety training, inclusive cycling training, safeguarding, disability specific training, there was much more of an emphasis made around the interpersonal skills of staff and volunteers, as described above. There were, however, some discussions around the need for either trained mechanics, or for basic maintenance training for staff involved in the delivery of projects. The cost of maintenance was difficult for some providers. Some providers had a mechanic who either volunteered or worked for them to help with the maintenance of cycles on a regular basis. This is a particular factor as not all bike mechanics will have the skills or confidence to maintain non-standard cycles.

"To enable those mechanics to have a basic knowledge of adaptive cycle maintenance because you do one thing, and it can seriously impact that cycle if you don't know how to do it and where to get the parts". (Cycling Organisation)

For most providers, training about different specific disabilities was not regarded as necessary for staff or volunteers. It was more important to have an ability to adapt and be flexible to needs. However, one disability organisation did suggest that some more in-depth understanding of neurodivergence and learning disabilities in particular could be useful, whether through formal or informal training.

"...maybe some extra information for people that are delivering so that they have maybe a wider understanding of some of the challenges, some of the, the quirks of participants. Whether that be because they've got autism and there's some sensory issues there. I think maybe a little bit more specific information about learning disabilities. There's loads of information on the internet, absolutely loads. But everybody you meet is different. You know, one person with autism is completely different to the next with autism. They're all very, very individual". (Disability Organisation)



Finally, two of the inclusive cycling providers involved in the research mentioned that they had a gap in the skills and the time available for their team to be able to do the organisational and administrative work involved in running sessions, for example in terms of booking people into sessions, health and safety, keeping on top of policies and procedures and monitoring and evaluation work. They suggested that having dedicated staff to be able to complete these types of roles would be valuable, as it takes away time from delivery. This is a reflection of how small some of the organisations involved in the provision of inclusive cycling are, with staff or volunteers having to cover many areas, often due to a lack of funding.

#### Working in partnership

The review of literature found evidence that working in partnership across the sector was important to bring additional knowledge and insight into disabled people's access needs and the barriers they face, raise awareness, and to increase resources. The research found that working with partners was important in two ways. Firstly, it was suggested that different inclusive cycling providers in a local area can specialise in different provision that can complement one another as well as signpost to one another. For example, providers focused on leisure cycling or active travel, and those offering skills or confidence sessions, with others providing hire and loan. There might also be occasions where they could pool resources and work together.

"We're not there to compete with each other either. We need to complement each other. Absolutely crucial". (Cycling Organisation)

Secondly, working with wider partners in the local area, including disability organisations, local councils and health and social care providers was also important to create a joined-up approach and to be able to better signpost and create pathways to make cycling sustainable.

"Because everybody's working in silo and when you're working on inclusive cycling, it's the need to be able to talk to each other about what you're experiencing". (Cycling Organisation)

## Summary - delivering cycling interventions

The research has highlighted a wide range of learning relevant to the delivery of interventions for disabled people for both leisure and utility cycling. These best practice examples can be considered by providers of cycling interventions, with evidence from interventions including the ICE programme demonstrating how this is successfully working in practice. The key best practice recommendations are as follows:



- **Providing inclusive sessions:** considering broader sessions which cater for all as these are likely to be more popular than sessions catering only for specific group(s) of disabled people.
- Understanding needs: taking time to understand the ways in which different barriers impact upon individuals, and what can be done to make cycling accessible for individuals in order to design a person-centred approach to delivery.
- Gathering feedback: working with participants themselves (where they want to be involved) to develop and design sessions that work for them and gather their feedback.
- Effective communication and managing expectations: having a range of contact options to meet different needs and preferences; offering opportunities for people to view sessions; ensuring people are fully informed about what sessions involve; allowing opportunities to meet deliverers in advance or to attend taster sessions.
- **Promotion and visibility**: hosting sessions in public spaces; promoting inclusivity of sessions through imagery and language.
- Ensuring accessibility of sessions and facilities: using accessible and easy to find locations; and providing information in advance on directions to sessions as well as on the facilities that are available.
- Offering year-round provision: exploring options to continue provision during the winter (if there is the demand from participants) including using indoor venues where possible; and offering alternative activities (for example social meetings) to enable people to keep their routine.
- **Providing social time:** making time for social interaction before, during and after sessions even where participants progress to cycling independently for travel, they may still like the offer of social rides and opportunities.
- Employing the right staff and volunteers: providing consistent staffing; as well as staff who have strong interpersonal skills and who are passionate about the benefits of cycling for disabled people; consider less formal training around disability specific needs; consider the allocation of roles to ensure that there are people with maintenance, administration and organisational skills, as well as delivery skills.
- Working in partnership: working in partnership with other inclusive cycling providers, as well as wider community organisations, disability organisations and the health and social care sector, as well as local authorities.



#### Conclusions and recommendations

This research fills a gap in existing knowledge and evidence around best practice in engaging disabled people in cycling for active travel purposes. The first step of the research was a literature review which demonstrated that the existing evidence base is focused mostly on cycling for leisure purposes, and there is little in the way of advice or guidance on developing cycling interventions to engage disabled people in cycling for active travel. The subsequent research depicted in this report demonstrated a similar theme – that the existing inclusive cycling provision across the UK is predominantly engaging disabled people in cycling for leisure.

The research builds the evidence base around cycling for active travel by understanding examples of where this is working in practice. Drawing on learning from Cycling UK's ICE programme, it explores how the programme is bridging some of the transport gaps for disabled people, in particular by addressing the barrier of the lack of cycle hire and loan opportunities.

This report provides best practice recommendations around how to inspire and support disabled people to try cycling for transport. These include:

- Make cycling for transport a normalised possibility for disabled people.
- Offer pathways to progression from leisure cycling towards cycling for travel including building in skills and confidence to take out loans.
- Have a range of cycles and adaptations available and encourage participants to test and explore where relevant.
- Take storage barriers seriously and consider this in the selection of cycles, build knowledge in staff on how to solve this and explore creative loan timings to remove this barrier where possible.
- Provide support and advice on all aspects relevant to active travel including the purchase of cycles and local routes and infrastructure.

In addition, the research offers some more general recommendations for anyone planning cycling interventions with disabled participants which highlight the need to take time to understand individual access needs as well as the interests and preferences of the people that programmes are targeting. It is clear that there is not going to be a 'one-size-fits-all' approach for all participants, but rather there is a need for flexibility in design and delivery in order to meet the needs of participants and address their individual barriers. Taking time to get it right will help to ensure repeat participation and help cycling become sustainable for disabled participants.



The findings from this research can be used in the planning and implementation of inclusive cycling initiatives in the future, as well as by Cycling UK to inform the future delivery of the ICE programme. In addition, ongoing research and evaluation of inclusive cycling programmes will help to further explore what works in delivery and the impacts that inclusive cycling opportunities provide.



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## Appendix 1: List of organisations

With thanks to the following organisations who contributed to this research:

- Sheffield Cycling for All, Sheffield
- Wheelers (Supportability), Stockport
- Inclusive Pedals, Chesterfield
- Sunny Cycles, Glasgow
- Warmley Wheelers, Bristol
- Pedal Power, Cardiff
- Wheel Together, Aberystwyth
- Pedal Power (Brain Injury Matters), Belfast
- Free Wheel North, Glasgow
- Get Cycling, York
- Wheels for Wellbeing
- Wheels for All
- University of Westminster
- UHI Inverness
- Everybody's Cycling
- York Cycle Campaign



## Appendix 2: interview / focus group questions

## Interviews with inclusive cycling providers (staff / volunteers)

## 1. Can you tell me about the inclusive cycling sessions that you are involved with?

- What is offered format and provision? (For example, loans/hire/skills sessions/led rides)
- Where is the location / setting? (For example, park. cycle path, roads)
- How often do sessions run? (Frequency? Are they all year round?)

#### 2. Who can attend the sessions?

- Are they open to all? Or are they designed for specific disabilities or demographics?
- How many people on average attend the sessions? (are they new participants, regulars, carers, family members)

#### 3. What is your role / responsibilities at the sessions?

- Are you a member of staff / volunteer?
- Do you have specific responsibilities (for example, registration, maintenance, supporting people with cycles)
- What do you like about your role?
- What do you dislike about your role?

#### 4. What are the key success factors that make the sessions work?

- Why/how?
- For example, what works in terms of marketing, staff, range of cycles, location, partnerships with local groups anything else?

#### 5. What are the challenges to the sessions?

- Why/how?
- For example, what are the challenges with marketing, staff, range of cycles, location, partnerships with local groups anything else?
- How do you overcome these challenges?

# 6. Our goal is to explore how to enable disabled people to cycle for transport. Do you find many that come to the sessions are able to use cycling as a mode of transport?

- Why/why not?
- What are the barriers to cycling for transport?
- (How) do your sessions enable people to cycle for transport?



- How can people be better supported to use cycling for transport?
- 7. If you were putting together guidance on engaging disabled people in cycling to be used by inclusive cycling centres, what would be the key things that you would include in such guidance?
- 8. Is there anything else you would like to add that would be useful for the research?

## Interviews with other organisations (cycling organisations, disability organisations)

- 1. Can you tell me about your role / the role of your organisation?
  - In what ways are you / your organisation involved in disability cycling?
- 2. [if relevant] How have you been involved in Cycling UK's Inclusive Cycling Experience programme?
  - How did you hear about ICE / how did you first get involved?
  - What was your role? (for example, referrals/signposting, bringing groups of participants to try sessions)
- 3. From your experience, what works in engaging disabled people in cycling initiatives?
  - Why/how?
  - For example, what works in terms of marketing, staff, range of cycles, location, partnerships with local groups anything else?
- 4. What are the challenges to engaging disabled people in cycling?
  - Why/how?
  - For example, what are the challenges with marketing, staff, range of cycles, location, partnerships with local groups anything else?
  - How do you overcome these challenges?
- 5. Our goal is to explore how to enable disabled people to cycle for transport. What are the barriers and facilitators for cycling amongst disabled people as a mode of transport?
  - How can disabled people be better supported to use cycling for transport?



- 6. If you were putting together guidance on engaging disabled people in cycling to be used by inclusive cycling centres, what would be the key things that you would include in such guidance?
- 7. Is there anything else you would like to add that would be useful for the research?
- 8. Are there any other organisations or people that you think it might be useful for me to speak with for this research?

## Focus groups with ICE participants

#### 1. Marketing

- How did you first hear about the sessions?
- What are the best ways of advertising sessions?
- What kind of information is important to know before signing up for a session?
- What wording or imagery works to encourage people to come to sessions?
- Where are the best places locally to advertise?
- How could we improve to attract more people?

#### 2. Location and facilities

- What factors are important in the location of sessions?
- How important is accessibility?
- What facilities are important?
- Is there anything that would make the location better?

#### 3. Cycles and available models

- How important is it to have a range of different cycles available?
- Were the ICE team able to find a cycle that worked for you?
- What models would you like to see in a scheme like this?
- Are there any adaptations that would make the cycles more comfortable?
- Do you have any other feedback on the cycles?

#### 4. Skills and confidence sessions

- Did you get what you needed or were hoping for?
- Is there anything that would make the sessions better?

#### 5. Loans

- Did you get what you needed or were hoping for?



- Is there anything that would make the loans better?

#### 6. Final feedback

- What is the one main thing that you think could be learnt for the future when planning other sessions or projects like this?
- Is there anything else you would like to share?