



# **An Evaluation of Ride Side-by-Side**

**Dr Kay Inckle**

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## **Foreword**

Ride-side-by-side grew from a cycling project for people with dementia, called Positive Spin. With the right cycles, appropriate environment, and support anyone can cycle.

In this time of climate emergence both local and national governments are keen to encourage people to move around actively and with no or low emissions. The promotion of active travel, cycling and walking, is largely aimed at low hanging fruit, young people wishing to commute by bicycle. Enabling older and less mobile people to cycle on roads, is a game changer, leading to many more people construing themselves as able to cycle.

With the help of a Department for Transport (DfT) innovations grant in 2017 we purchased 3 side-by-side cycles, and enabled people from sheltered housing and care homes in Hackney and Lambeth to make cycling trips.

People loved ride-side-by-side. Some used the cycle in place of a taxi or car trip. They enjoyed the social aspect sitting beside someone and pedalling together. They got exercise. Felt more independence. People observing the side-by-side enjoyed the spectacle, and often made comments such as 'I'd like to do that', with a thumbs up.

Following the success of this initial pilot, Bikeworks won funding to expand the project to East and West London. This evaluation report of the scaled-up project confirms the initial finding. People least likely to cycle were happy to ride and benefitted in many ways.

One particular benefit is giving lonely people the opportunity to get out and about and socialise, riding with up to 3 other people. Bikeworks is taking ride-side-by-side to the next level offering cycling trips to people in several London Boroughs with a grant to tackle loneliness with transport from the DfT.

We are on target to realise Bikeworks vision: that anyone can enjoy cycling for travel, leisure, and wellbeing.

**David Dansky, Head of Business Development, Bikeworks**

**May 2022**

## **Executive Summary**

The evaluation of Ride Side-by-Side (RSBS) draws on data gathered in 2020 and 2021 from RSBS participants and pilots. A total of thirty-nine RSBS participants completed semi-structured interviews, individually and in groups, and twenty-seven completed a demographic survey. Six RSBS pilots completed a mixed-methods survey consisting of binary, multiple-choice and free-text answers. Interviews were transcribed and manually coded then grouped and sorted in a thematic analysis and synthesised with the qualitative data from the pilot surveys.

Participants' ages ranged from eighteen to over eighty years. 85.2% identified as having a disability or health condition (44.5% cited more than one) and 55.5% of participants described themselves as Blind or visually impaired. 59.26% identified as female and 40.74% as male (no participants selected other gender categories). 40% of participants described themselves as white English/Welsh/Scottish/Northern Irish/British, 36% as British Asian, 20% as Black British Caribbean, and 1% as mixed white and Asian.

The data highlighted a number of key impacts of the RSBS project. RSBS provided essential mobility and independence for participants, many of whom had no other opportunities for physical activity and struggled to use public transport – issues which were exacerbated by the pandemic.

One of the key themes to emerge from the data was health and wellbeing. The combination of an accessible form of physical activity, alongside the sociable nature of the RSBS vehicle, and the access to nature and the wider community had significant mental as well as physical health impacts. These impacts were felt all the more keenly after lockdowns where many participants had been stuck indoors without social contact, physical exercise or access to nature. Participants also reported feeling a sense of achievement having completed a ride that additionally boosted their wellbeing and confidence to continue physical activity.

Social connectedness was highlighted by both participants and pilots as one of the most important features of RSBS. The social connections between the riders, between riders and pilots, and between riders and their local community were significant for health and wellbeing. Not only was the social contact in itself an important feature, it also provided

support and motivation to exercise, the shared pleasure of visiting new places and, for a number of participants, lasting new friendships.

RSBS participants often experience complex life situations which present barriers to mobility, physical activity and social participation, accruing negative health and wellbeing impacts. Participants frequently reported how much they appreciated the skills and sensitivity with which the pilots ensured that their individual needs were met, allowing them to feel safe and to fully participate in, and benefit from, the experience. Pilots similarly reported that both practical and social skills were essential to their role, and many had previous work or voluntary experience in a related field prior to joining RSBS.

RSBS provides access to mobility, exercise, social participation and community connectedness – and the mental and physical health benefits of it – to demographic groups who are often significantly disadvantaged in this regard. The pandemic has disproportionately impacted these groups even further and it is essential that they are not similarly left behind in pandemic recovery policies including those aimed at active travel and social prescribing. Participants and pilots strongly desired an expansion of the service, not to meet the needs and aspirations of current service-users, but also to reach others across the wider community who would equally benefit from it. These aspirations and impacts are reflected in the recommendations.

### **Recommendations**

- Continue to work with key current participant groups e.g. older and disabled people
- Explore working with organisations/groups for people with mental health needs
- Explore working with carers organisations
- Explore working with organisations/groups working to combat social isolation and loneliness
- Ensure that health and social prescribing projects – public health and active travel/transport focussed – establish pathways to RSBS
- Expand service so it is available during evenings and weekends
- Expand service so there is a wider range of leisure and taxi rides available

## Introduction, Methods & Context

### Introduction

Ride Side-by-Side (RSBS) is a free journey service for people from marginalised groups – akin to a pedal-powered Dial-a-Ride. Participants are collected from their location of choice by a pilot using an electric-assist side-by-side tandem cycle made by the Dutch company Van Raam. The cycle has a trailer attachment so that three participants and one pilot can ride at the same time during a 1.5 hour time slot. The pilot can assist participants getting on and off the cycle and provide information and support to riders as required. Pedalling is not compulsory and participants can equally sit back, relax and enjoy the ride.

The service is aimed at older people, people who have mobility problems or visual impairments or those facing social isolation. RSBS gives participants a chance to enjoy some gentle exercise and fresh air in the company of others. RSBS was first launched by Cycle Training UK in Hackney in 2017 and funded by a Department For Transport Innovations Fund. The aim was to offer people with limited mobility an active travel option in a context where most cycling schemes targeted those who were already active.

Bikeworks took over the project and raised funding to significantly scale-up the delivery across East and West London. However, COVID-19 arrived just as the scaled-up Ride-Side-by-Side was about to launch in Spring 2020. With agreement from the funders, the funds raised were diverted to deliver emergency support (meals, food boxes, medication) for people unable to get out to buy basic supplies.

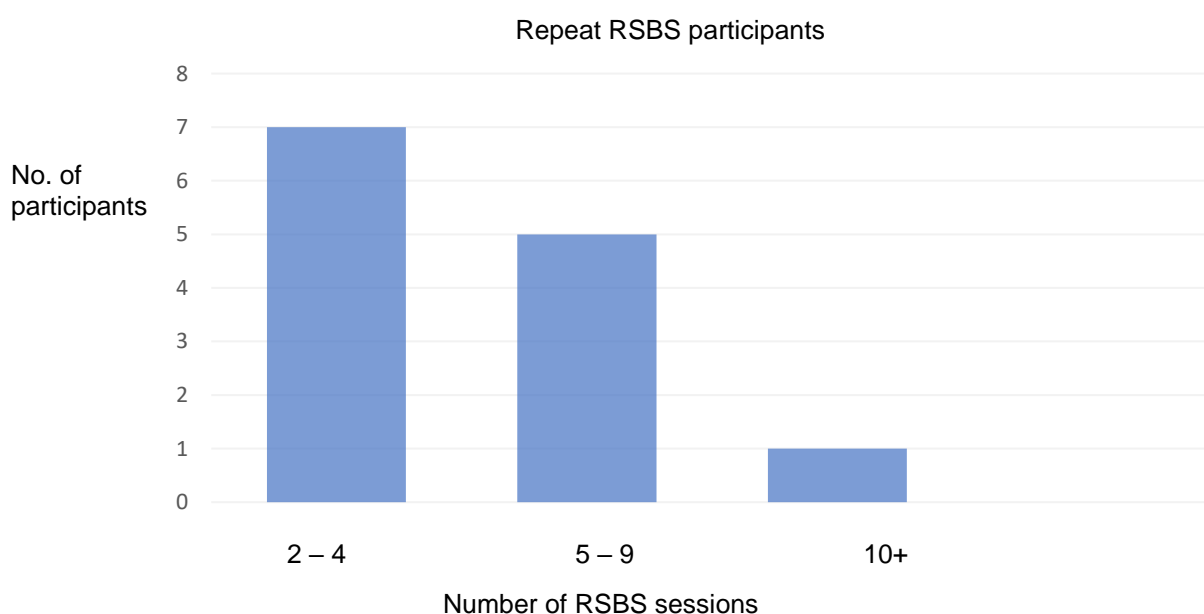
The project has been operating in its current form since the summer of 2020. During the pandemic disability sport was permitted to continue, however many potential participants felt afraid to leave their homes and cycle so a reduced number of journeys took place. The majority of journeys that have taken place to-date have been of a leisure and sociable nature with passengers going for rides around their local areas and green spaces. There has been less uptake to use the cycle as a taxi service to get to and from key journey destinations.

### Evaluation Methods

Bikeworks brought in an independent researcher in 2020 to conduct an evaluation of the RSBS service. Prior to this, some data had previously been gathered from RSBS

participants by a pilot immediately after their ride. The evaluation design included semi-structured interviews for first time and repeat RSBS participants (see appendix). A number of staff received interview training so that the interviews could take place by telephone a short time after the ride/s and with an interviewer who had not immediately piloted them. Consent was sought in a two-stage process, with participants initially providing written consent to be contacted for interview when signing up for their RSBS ride (see appendix), and consent was re-sought and confirmed, verbally, before the interview commenced. Participants (n=27) also completed an online demographic survey separately to the interview. Not all of those who completed a demographic survey participated in an interview and likewise the reverse was true. As such the demographic data provides a snapshot of RSBS participants rather than mapping directly onto the interviewees.

In the initial evaluation timeline between thirty and fifty interviews were expected to be completed by spring/summer 2021. However, pandemic restrictions and staffing changes slowed the process and eighteen interviews were completed by the end of 2021. Three of the participants were carers, five of the interviewees were first time RSBS participants and thirteen were repeat riders. However, the repeaters had not completed a first-time interview so only a minority of respondents were directly asked about their day-to-day mobility, although this topic often arose in response to other questions. Repeat riders had participated in a varying number of RSBS sessions, ranging from two to more than ten.



The interviews with repeat and first-time participants were added to the transcripts from the original data collection. The original interviews provided an additional five transcripts, one from a solo interviewee and four from group interviews with participants from organisations with whom Bikeworks had referral partnerships, one transcript came from a street party event. These comprised a total of twenty-one individual interviewees within these transcripts making an overall total of thirty-nine RSBS participant interviewees. The transcripts were manually coded using an initial set of eighteen codes which were subsequently refined to eleven. These codes were then grouped and sorted to allow a thematic analysis of the data.

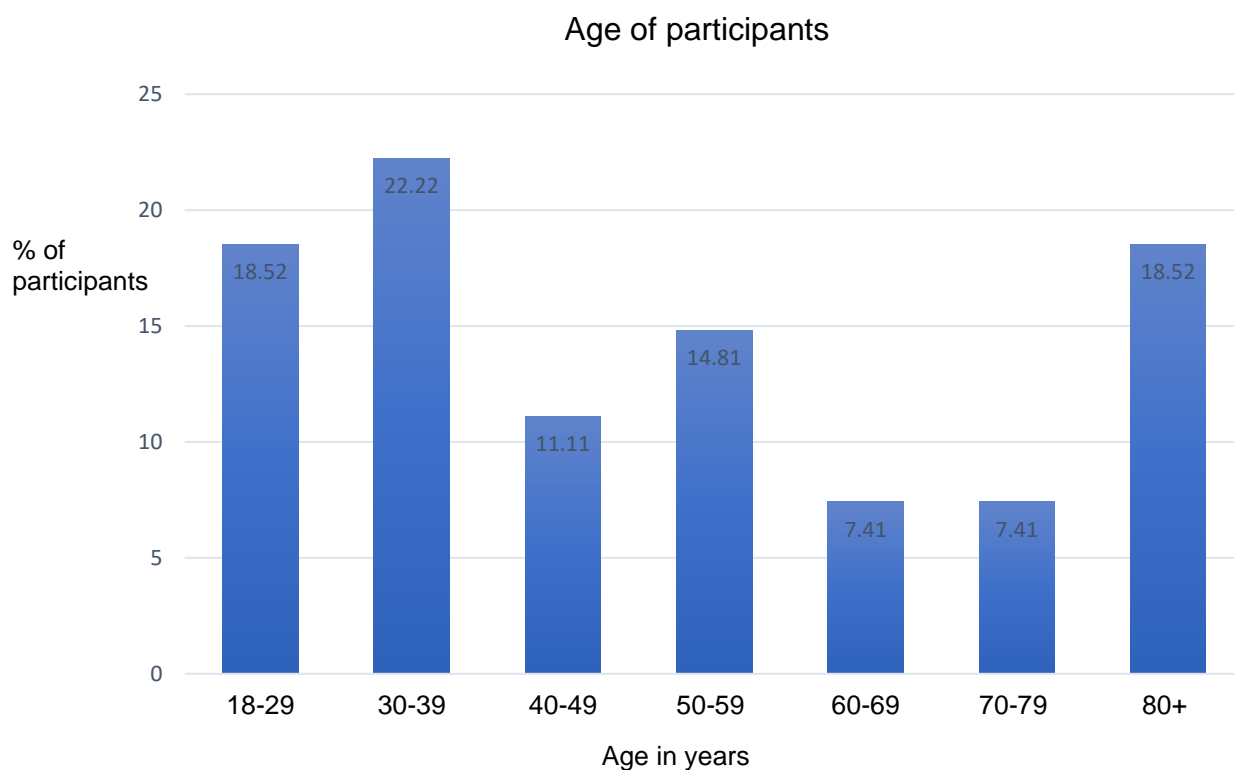
The evaluation design also included semi-structured qualitative interviews with pilots. However, the disruption to service and staffing caused by the pandemic made this more difficult to achieve as time went on: interview-trained staff had moved on and many of the pilots were juggling complex work/life situations that made interview scheduling a challenge. In order to complete the evaluation, the interview themes were redesigned into a mixed methods survey (see appendix) that comprised binary, multiple choice and free-text questions. Information about the use of the data and the opportunity to give consent was provided on the first page of the survey. The survey was disseminated to pilots by the RSBS manager and the completed paperwork was emailed directly to the researcher by each individual pilot. This added a layer of anonymity which would have not been present in the original design where pilots were to be interviewed by a member of the Bikeworks team. However, it also decreased the opportunities for further exploration and probing of the answers given. Surveys were delivered to a total of seven current pilots and six returned completed data.

The pilots' transcripts were manually coded and then grouped and sorted to enable thematic analysis. The themes from the pilot data were framed in an initial draft summary which was then synthesised with the themes from the participant transcripts. Pilots were not asked to complete a demographic survey since the small number of them and the size of the organisation reduced the anonymity of protected data categories. Pilots did, however, report on key features of their background to working with RSBS.



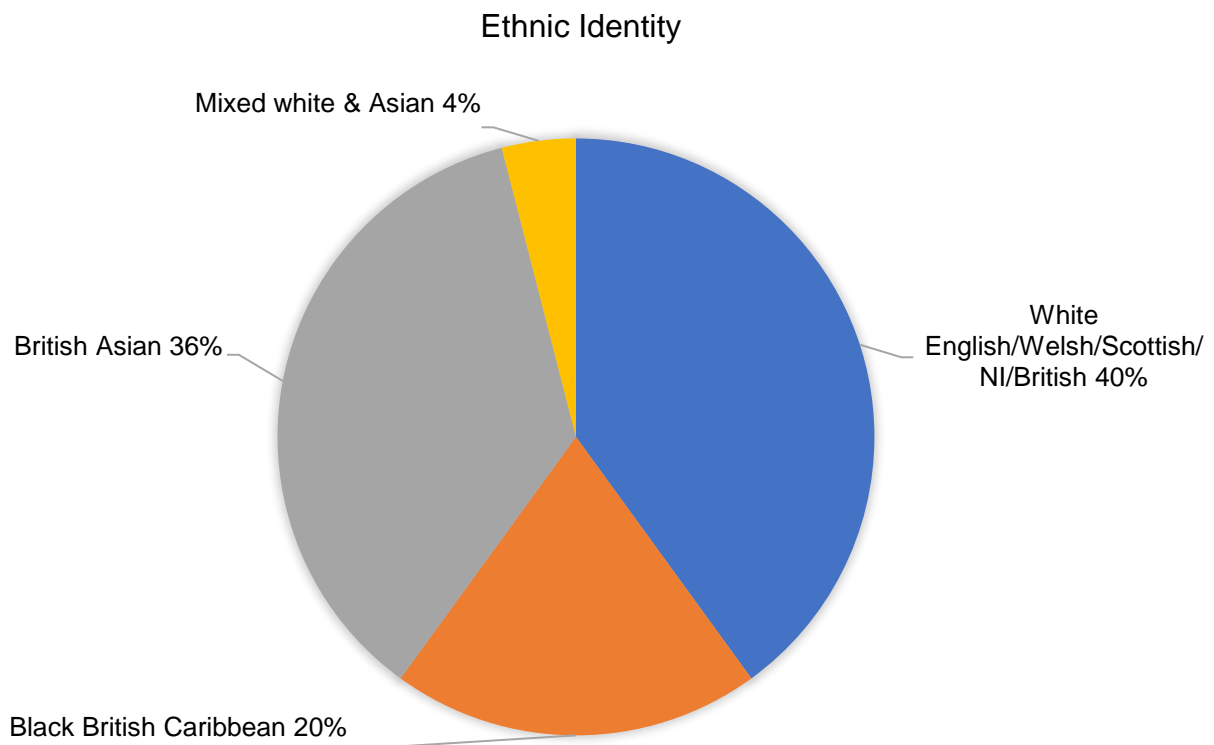
Demographics: Participants (e.g. riders/service-users) and pilots.

Twenty-seven RSBS participants completed a demographic survey (see appendix) between June-October 2021, providing a snapshot of the characteristics of RSBS service-users. A slightly higher proportion of survey respondents (59.26%) identified as female than male (40.74%) and none identified as trans or non-binary. Ages ranged from eighteen to over eighty years.



Out of the twenty-seven respondents 85.2% (n=23) identified as having a disability or health condition, 44.5%(n=12) cited more than one, and 55.6% (n=15) listed being blind/visually impaired amongst these. Others reported a range of mobility-related conditions as well as diabetes, dementia, hearing impairments, and a small number cited neurodiversity or mental health difficulties.

Twenty-five respondents supplied data regarding ethnic identity: 40% (n=10) identified as white English/Welsh/Scottish/Northern Irish/British; 20% (n=5) as Black British Caribbean; 36% (n=9) identified as British Asian which broke down further into 16%(n=4) British Asian Bangladeshi, 8% (n=2) British Asian Indian, 12% (n=3) British Asian Pakistani; and 4% (n=1) identified as mixed white and Asian.



Of the twenty-seven respondents 24 supplied their occupation: 6 were retired or semi-retired, 2 were fulltime home-makers, 3 were unemployed or not working, 1 was a student and 1 undertook voluntary work. Eleven were employed in jobs which ranged from working in finance, IT, the civil service and HR to cashier and support work.

RSBS pilots did not complete demographic data as the small number of them surveyed would make them too easily identifiable within the service. However, pilots did provide data regarding the background to their role within RSBS. Measured to January 2022 when the last of the pilots returned their survey, they had from six to twenty-four months experience working on the RSBS project, with 50% of the pilots having worked with RSBS for eight to nine months. Half of the respondents (50%) piloted once a week, two piloted more frequently and one less often. Two thirds felt this was the right amount, but two of those who piloted once-weekly would have liked to have done more. All six (100%) of the responding pilots had previous experience of working in the cycling sector and five (83.3%) had done similar paid or voluntary work.

## RSBS and its impacts

Participants usually accessed RSBS through organisations or services that they were connected with. Many had not cycled for years and some not at all. For all of them the RSBS cycle was a completely new experience and they approached it with feelings ranging from excited curiosity to fear and concern. Fears included being unsure about their ability to cycle (particularly for those with physical disabilities and long-term health conditions), the safety of cycling in London or what the experience would entail. However, the impacts of the RSBS service are nowhere more apparent than in the contrasting feelings that the fearful participants reported after the ride. One participant described herself as “terrified” before the ride, explaining that, “I haven’t been out by myself for ten years”. Afterwards she described feeling:

Oh fantastic! You can’t describe what it’s like to be free and have the wind in your hair on the bike! Fantastic! [...] As soon as I met the pilot she put me at ease and I was fine, it was great. [...] I felt a bit exhilarated I suppose. I was sort of buzzing! Yeah, it was something that I thought I would never do again, so it was absolutely WOW!

Another participant was concerned about how much of a toll cycling might take on her physical impairment, but she was quickly reassured: “A bit apprehensive because I have a bad knee, but when [the pilot] said I didn’t have to pedal, I was fine.” She appreciated the ease of mobility that RSBS provided her with as well as an exercise opportunity for her husband who peddled alongside her.

It was worth it, I didn’t have to limp around, I enjoyed it, and my husband enjoyed it so much I will be booking sessions for him for exercise, he seems to have benefitted from it, he’s waiting for another go.

Cycling in London was daunting for some participants, especially those who had not cycled there before. A carer described her anxieties before the ride: “I was wary of traffic and cars coming the other way, I might feel vulnerable, I don’t ride a bike on the street, I wasn’t brought up in London and never ridden a bike here, so wary of traffic.” As soon as the ride began her fears were allayed and she embraced the experience:

From the second that I got on it, I was laughing, it was fantastic, so much fun! It was brilliant – because [the pilot is] the one controlling it, we don’t have to steer, I liked that I could just sit back and take it in. [...] I felt relaxed and excited.

The pandemic context added an additional level of anxiety for some participants, for example one reported feeling “Scared of contracting the COVID-19 Virus” before the ride, but afterwards that he found it, “Amazing, liberating”.

The contrast between the feelings that the participants reported before and after their ride highlights a number of the key features of the RSBS experience and the main themes explored throughout this report. It provides transport and mobility, creating a sense of freedom and independence for those who often face barriers to mobility. The exercise (for those who pedalled) coupled with the social contact and being outdoors resulted in a significant boost to participants’ physical and mental health and wellbeing – particularly in a pandemic context where many had been confined indoors alone without access to exercise. The skill and sensitivity of the pilots is also crucial in enabling participants from a range of backgrounds and life situations to feel safe and accommodated during the ride. Pilots themselves identified both social and practical skills as essential to their role and the authenticity of their connections with participants is evident throughout the data. The overwhelmingly positive response to the RSBS service is reflected in the aspirations of participants and pilots for the service to include a wider range of both leisure and taxi rides and to operate during evenings and weekends. These aspirations are reflected in the recommendations which explore how the service could be expanded to tap into the well of unmet needs and support post-pandemic recovery, especially for those who have borne some of the largest impacts of the pandemic and are at risk of being left behind as restrictions are lifted (Health Foundation, 2021).

## RSBS & Its Impacts

### Mobility & Independence

Mobility and independence were significant elements of the RSBS service, both when it was being used for leisure rides and when it functioned as a taxi service collecting and transporting participants to appointments or All Ability Cycle sessions. This was intensified during the pandemic when many participants stopped using public transport and lost opportunities for exercise and outdoor activities due to lockdown restrictions (see below). RSBS also gave the participants the opportunity to experience something new and expand their aspirations.

The demographics of the majority of the participants in the evaluation (e.g. older and disabled people) meant they often experienced barriers to independent mobility, a context in which the RSBS experience offered a transformational intervention.

I think the feeling that I could do something again. It was that sense of independence that I can achieve something again. You know, whereas before I'd always been told no, no, no, no, no. It was like YES you CAN do this, let's GO!

It's being independent, I think, having that independence and knowing that I can get from A to B without having to rely on other people, like other family members or anything.

Pilots also recognised the freedom and independence that RSBS offered participants, one described it as their favourite aspect of their role:

Engaging with my riders, being a highlight in their week. These rides are very important to them and give them a sense of freedom they otherwise would not be able to enjoy.

RSBS enabled participants to make leisure journeys that might otherwise be difficult or costly to accomplish:

I don't always feel confident walking to places, so getting an uber is easy but it can be expensive, obviously it adds up. [...] Just trips like, you know, going to Regents Park for example, going round the park, or going to an outdoor market, to experience so many different markets and stuff in London, just go and check out different neighbourhoods, you know, like exploration of London.

I have a [electric powered mobility] scooter, one of these fold-up-throw-in-the-car. I have to sit in a very tight position because it's not one of those big road scooters. It's something I use for essentials but I wouldn't go on my scooter for a pleasant time out to get some fresh air, which is what the bike ride is for me. I get some fresh air and I'd be moving rather than stuck in one position.

Many forms of mobility, including public transport and disability-specific services such as dial-a-ride, can pose challenges for disabled and older people in terms of accessibility, reliability and navigating COVID safety. In this context the RSBS taxi service provided an essential form of independent mobility and transport.

Since lockdown I'm not using public transport [...]. It [RSBS] gives me a good sense of independence [...] I felt really good. Just to know that I'm going to get a ride back and I'm not waiting around. Because I used to wait around. I don't know if you've heard of Dial-a-Ride? [...] Sometimes they can be late and sometimes they can be early. So it was a case of having to wait around for them, before lockdown having to use their service [...]. There have been quite a few different occasions where I have waited around for so long. And there was one particular occasion when they didn't turn up at all.

The transport element of RSBS was also crucial from carers' point of view:

It's really good because it makes transport much more accessible for my mum. Using the Bikeworks RSBS scheme allows her to be mobile without having to negotiate public transport.

The people that I support would never be able to get out and about in the same way. Using public transport is not always a viable option for some people, and so without having this scheme there'd be very few opportunities to be mobile and to experience being out and about in the community, to see things and feel connected to where they live or get to appointments or things that they need to do. It has made a significant difference to the people who have used it.

Another important dimension of independence for disabled participants was the anonymity that cycling the RSBS offered. Although the RSBS cycle is an unusual vehicle which attracts significant public attention (see below), it was largely perceived as fun or interesting rather than a special and therefore stigmatised service for disabled people. This gave participants a sense of autonomy that they did not experience using disability-specific services.

I think that it was, in a way, private. You know, no-one was judging me and I was enjoying it, and it was really nice weather.

The fact that I could pedal, that was important, if I wasn't able to pedal then I would have just felt [...] that I'm just some disabled person being wheeled around, so it was really important for me to have that opportunity to pedal. I liked it when I was sitting at the front as well with the pilot. [...] I want to be as normal as possible [...]. If you've got lots of people sitting there then it's just kind of more attention, you know, like the van that takes disabled people to school kind of thing. I used to go to school in a van for disabled people, and it just shouts a bit too much. I think the thing for me is being side-by-side with the person at the front, looking like I'm contributing.

This altered social perception was also valued by carers:

It was just a different experience, very refreshing, and a way to connect with our neighbours in a different way. The children were always very attracted to it and they asked at some point if they could just have a little go, just a few seconds in a secure environment, and it just made the connection – we were not just people going slowly on the wheelchair, we had this fun element.

RSBS provided mobility for participants, enabling them to experience autonomy and independence in a new way. In doing so it often gave participants new aspirations, expanding the possibilities of what they might be able to do or would like to try. Some older participants had never cycled before, but their RSBS experience inspired them to pursue cycling independently: “I have never ridden a bike, this was the first time in my life, I'd like to learn to ride a bike now.”

A small number of visually impaired participants who had been on a number of RSBS excursions were offered the opportunity to pilot the cycle (in a safe off-road environment). This was a significant boost for the participants and highlights the breadth of potential impacts of the service as well as the skill and sensitivity of the pilots (see below).

Then there was another experience two weeks ago whereby the pilot decided to give me the steering wheel! [laughs] Of course with checking my confidence and my vision acuity, how much I could see and how much I knew of the route. And that was a total surprise, absolutely big, big surprise for me because I never thought that I would actually be riding one of these myself – of course under full guidance and supervision! It was in a park that I know, where I've been on a bike before myself. [...] And it just gives me my confidence back because I had not been on a bike for almost two years – I had an eye operation as well. I didn't expect that experience, having that control of the bike and riding around with no incidents and I am so glad the pilot gave me that opportunity to do so.

RSBS provides independence and mobility in a variety of ways. It enables participants to make independent journeys on their own terms where public transport feels unsafe, unreliable or difficult to access. RSBS also provides opportunities for participants to discover new possibilities, boosting their confidence and aspirations – all of which are essential to positive mental health and wellbeing (below)

### **Health and Wellbeing: Physical Health**

RSBS provides access to physical exercise and health via tandem cycling. The exercise and physical health benefits of the project were a significant theme for participants, who described it as, “Good exercise, [a] good workout”. The RSBS vehicle makes cycling accessible for those who might not be able to either ride alone or with a conventional tandem.

It was very good, it also happened to be a nice day weatherwise and we were really happy to get out and be outdoors, so it made us feel very good, and we were able to pedal and get some exercise and at the same time sit comfortably on the seats and enjoy the fresh air outdoors, so it was a very nice experience.

Many participants particularly appreciated RSBS because they faced barriers to exercise because of disability, health or caring-related issues. Lack of access to physical activity creates a significant risk of secondary health conditions for disabled people (Inckle, 2020).

Getting out’s good and obviously getting some exercise is even better, it’s kind of hard to get your points up on your Fitbit when you’re disabled.

I think from a cycling point of view, it’s very good, because often people like myself [e.g. blind/visually impaired] struggle to get people to cycle with, so it’s been an excellent project which means I get to cycle regardless of worrying about trying to find my own pilot. It forces me to go out and cycle which is good for my health and wellbeing. [...] It’s been a brilliant experience, and I thoroughly enjoyed it. I physically felt like I had worked out.

Even participants with complex health situations who had very few options for physical activity found RSBS an accessible and fun form of exercise and they quickly realised wider health benefits from it.

A big difference, especially in terms of physical health, because I’m a diabetic, so it does help, and I’ve got knee problems, and since I’ve been doing the bike rides



that's actually calmed down quite a lot. But since I stopped it for the last couple of weeks it's flared up again. The more exercise I do the better I feel. And I feel stress free and relaxed.

Basically I've had 2 knees, 1 hip, I've got a damaged foot and a replaced shoulder, so in other words I've got 4 complete replacements – and luckily I got it all done just before the pandemic. So I need exercise, and unfortunately because I have a dodgy foot, which the only thing they can offer is fusing and I don't want to do that, I don't actually walk around enough or do stuff for myself, so I've been to the gym a bit but not much. So this was the reason I went with it, I thought yeah, this is a really good idea.

Those who spend much of their time as the sole carer for a loved one also face barriers to exercise. The set-up of the RSBS cycle allows both the carer and the cared-for to simultaneously benefit from cycling.

I'm in a very kind of good shape. I don't have the opportunity to do that kind of thing because I need to be with [name], so that gave me an opportunity to kind of have a feeling of something that I am very used to and I enjoy. So that was good for me, getting my legs moving in that way.

The social dynamic of the RSBS cycle was important in mitigating any motivational or fatigue issues that participants may battle when exercising alone.

It's really good, and it's good exercise and you're going along and you've got the person next to you and you're talking to them, and you're not really noticing that you're doing all the pedalling that you're doing. The time goes really fast because you're just pedalling and talking and you know it's a sort of good experience.

The social nature of RSBS also provided the camaraderie and motivation to work hard: "I remember we had a good laugh we were like let's push it, let's go fast!"

RSBS not only provides physical exercise, but also the support and/or accessibility that enables people to participate who might otherwise face barriers to physical activity.

Exercise is not just linked to physical health it is closely connected to mental health and wellbeing.

## **Mental Health**

Mental health and wellbeing were significant themes of the RSBS experience reported by participants and pilots. The relationship between physical exercise and mental health is

such that exercise is increasingly prescribed by health services in place of, or in addition to, conventional treatments (NHS, 2021). Participants frequently discussed the mental health benefits resulting from the combination of outdoor, physical exercise and the sociable nature of RSBS:

Mental health, it would be quite good for that because it would mean that I could go out on a regular basis in the fresh air and so on, and of course meeting people is always good for the mind and the soul as they say.

After the ride I felt quite good, energised. In terms of the mental health, yeah I felt quite relaxed and fresh, and again [name of pilot] and I had quite a good laugh – we were chatting and joking about lots of different things, so that was great, I felt really good afterwards.

It would definitely give me the opportunity to be outside and to be able to cycle which I cannot do without a pilot, so it is definitely giving me the exposure of being out there. It will definitely improve my mental health and my physical fitness, and also it will help me from a social aspect where I am meeting and talking to new people.

The mental health benefits were also keenly felt by carers, whose own health and wellbeing often takes second place to the needs of the person they are caring for, especially when they lack wider support.

My mum was just in awe of everything, and I mean every living thing that passed. My mum is normally quite depressed, she has vascular dementia, she can be quite cruel in her words, but she came alive, she was just loving everything and it was a glorious day as well, sunny and warm, and she was just loving it, she's never been on a bike before in her life. [...] I can't remember who told me about it and I just thought: I'm not going on a bike ride with my mother, who the hell do you think this is?! I knew nothing about Bikeworks and wasn't really interested, I've just got tons going on – I'm a carer who's exhausted all the time and my general wellbeing has been crushed into the floor on a daily basis, not my mother's fault at all, it's just her condition. [...] To see my mum, when she smiles, I smile. When she's a bit down it's difficult for me to smile. I don't get that many opportunities to smile so when I do it's golden, especially the first one, it was like goodness gracious me what have I been missing all this time! I think there are a lot of people in my situation who could use this service, it would do them a power of good. It boosted my wellbeing for the rest of the day and even when I'm talking to you about it now I remember the sun glistening through the trees and my mum just totally saying [to the pilot] "I love you, thank you so much for doing this". Anything that can just give her a glimpse of the beauty of being outdoors and her love of the outdoors is something that's just golden.

Many of the RSBS participants encounter significant barriers to participation in day-to-day activities that are integral to good mental health such as exercise, social connectedness, access to nature, mobility and independence. RSBS provides a means to overcome these challenges *and* in a fun way which was appreciated by the pilots as well as the participants:

It has to be bringing the sheer unalloyed joy of cycling and physical activity – a passion that I take for granted – to people who do not normally get the chance to do it.

Mental health and wellbeing are mutually reinforcing, one is essential to the other and both underpin quality of life.

### **Wellbeing**

Wellbeing was one of the largest themes from the participants' transcripts and it incorporated aspects of physical and mental health and social connectedness. A significant additional feature was being out in the open air and this was felt all the more keenly after lockdown (see below).

Being outside and being in traffic, and just to experience what it's like cycling in traffic even though I wasn't pedalling, just to be out, you know because being in lockdown it's not nice being at home for so long, and just being able to get out for that little while and for some fresh air was really nice.

Oh, the wind in your face, the comfort of sitting down in that seat and riding that bike, it's just amazing!

Being outside also provided a strong motivation to exercise: "I wouldn't go to the gym and sit on a bike! Whereas here I get the opportunity of cycling in fresh air." Participants also benefitted from the feeling of achievement after they had completed their ride. This was especially important for those who face barriers to exercise and mobility.

I guess a sense of achievement and the fact that I could go out there like anybody else and ride on the road, that was the most exciting part for me.

Feeling I could do something, because I'm stuck in the house.

Knackered! [laughs] Quite tired in a way. And pleased that I'd done it. I did it for [name of carer], I wanted to make her pleased.

A number of participants also appreciated having something to focus on other than the challenges of their own personal situation and/or the world at large.

It just gives you that sense of normality, away from what's happening in the world.

It's the concept of distraction. Distracting my mind from the awful situation of the coronavirus and all of that, distracting me from health difficulties, and it's a real diversion from these things, so I think that's terribly important, well it was for me.

Participants often described a feeling of all-round wellbeing following the ride:

I felt relaxed, a burden lifted off me, I enjoyed it, I didn't want to get off the bike.

I feel stress-free and relaxed.

I feel lighter, relaxed, not out of breath, invigorated.

This was also true for carers, who not only had the joy of seeing their relative immersed in a positive experience, but also experienced the wellbeing benefits for themselves.

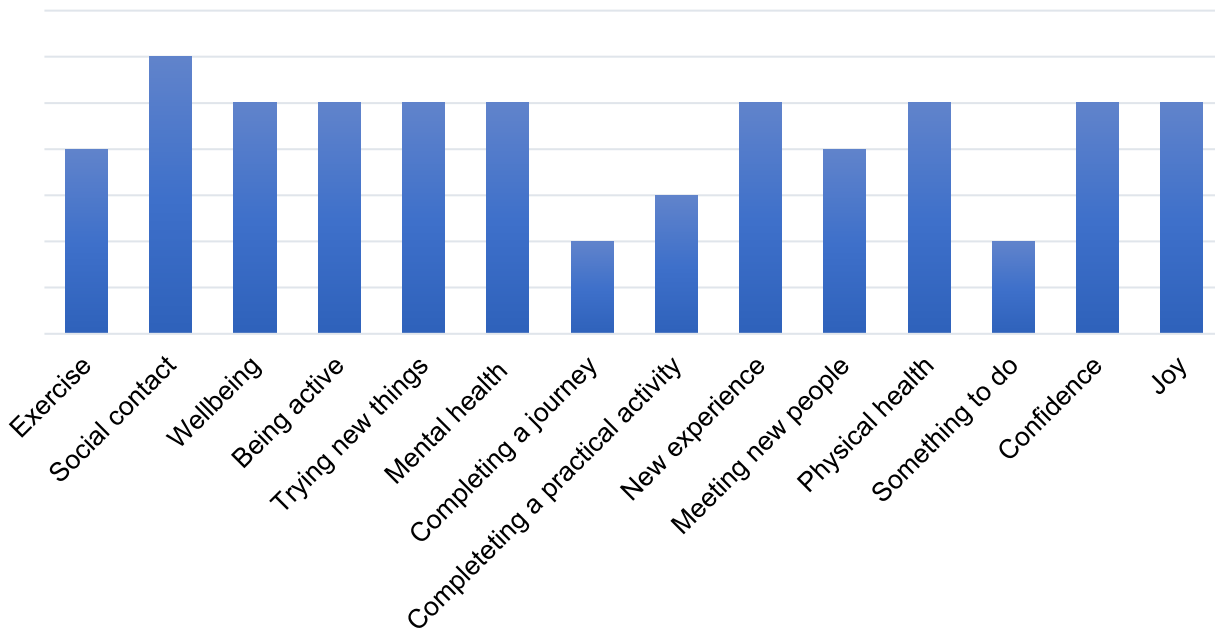
You know you could hear her, you could see her, thoroughly engaged, she had her fingers apart, her hands out, just feeling the air, it was just such a beautiful experience. [...] It would be up there in the tens, you know, the feeling I got from it and just thinking about it now. That feeling of wellness and not worrying about anything. It would have a major benefit on my wellbeing and my mother's.

Wellbeing is a broad concept, closely linked with physical and mental health. RSBS participants described wellbeing in a range of ways including the feeling of being in the open air, a sense of achievement, feeling relaxed and destressed and having a positive experience for themselves and those that they cared for.

### **Social Connectedness**

Social connectedness is essential for good mental health and social contact can also make physical activity more enjoyable, motivating people to take regular exercise and helping them to feel a part of their wider community. The survey asked pilots what they felt was the most important element of RSBS for the participants and all of the pilots (100%) responded that it was social contact.

## What is the most important benefit for riders?



83% additionally identified wellbeing, physical and mental health, being active, trying new things, confidence and joy as key benefits that participants experienced. Mental health has a two-way correlation with social contact, confidence, trying new things and positive feelings such as joy. Mental health is also closely related to physical health, which in turn, is impacted by opportunities to be active, especially alongside others. These opportunities are very often limited for disabled people, those struggling with mental health issues, older and socially isolated people, particularly those living in disadvantaged areas. The social dimension of RSBS is therefore integral to its wider health impacts.

RSBS participants also pinpointed the social dimension as a primary benefit. Taking physical exercise alongside others was positive because it could act as either a distraction from the physical effort or provide the camaraderie and motivation to work hard (see above). Participants identified four dimensions of social connectedness: meeting new people; developing relationships with fellow riders on repeated outings; relationships with pilots; and increased connection with the wider community.

RSBS provided the opportunity to both meet new people and develop ongoing relationships and this was particularly important for those who experienced barriers to social participation which were exacerbated by the pandemic.

And from the perspective of meeting new people every session, you end up meeting new people and form friendships which is also good from your social aspect. [...] If it's new people you get to have new conversations, whereas if it's the same people you can have a good laugh because you've already built that relationship.

For some participants these relationships continued beyond the RSBS sessions.

I think it's great, it gives us a chance to chat and socialise [name] and I are going to meet up for a drink, so it's nice to be able to socialise like that outside as well, and learn about what other visually-impaired people do, so we can help each other in terms of how we might tackle certain things. It's great to chat with [names] in terms of how they manage with their sight loss.

Many RSBS participants also highlighted the social connections with the pilots as an important part of the experience.

I was looking forward to the journey and having [name of pilot]'s company.

The pilots are very friendly and helpful, we have a good laugh, and you know I just really enjoyed it. I felt really relaxed. The weather was great.

The participants' accounts portrayed how the pilots seamlessly balanced the social, supportive and practical elements of their role in a genuine and authentic manner.

Having the pilot with me so I could ask questions about the cycle and where we were going, that was a good experience, talking to the pilot, and she also told me "This is West Ham Stadium, and this is for swimming and this is for basketball." like an audio description, that was the best thing.

It was a nice social experience as much as it was to get me moving. Basically I was handled really well and [the pilot] explained a lot about it and she was very chatty.

The pilots also highlighted the significance of the relationships with the participants for them. When asked what they enjoyed most about being a RSBS pilot, all of the pilots emphasised the social as well as the practical dimensions of their role. Their favourite aspects were the combination of enabling people to cycle and experience the physical and mental health benefits of it alongside the social connections with people they would not ordinarily meet in their day-to-day lives. For example:

Chatting with people, discovering a lot about disability and different worlds in general while being able to cycle.

Helping others to be able to cycle, bringing them joy and getting to know the same people over multiple journeys.

Indeed, for some pilots the new relationships and experiences with riders was the overwhelming take-away from their role.

I love this project and had beautiful moments with people coming on the bike. I made new friends and had incredible conversations.

The authenticity that the pilots bring to their role is key not only in providing a new, safe and enjoyable experience for participants, but also in connecting with them in genuine ways. This theme emerges again in terms of the skills and attributes that pilots bring to their work and the powerful impacts that it has for the success of the project (below).

The fourth element of social connectedness that participants highlighted was with the wider community and the interactions that the RSBS cycle stimulated.

The bit that appealed to me was that everybody else in the streets were enjoying it too – waving and saying hi, very social and exciting, I just adored it, I think we all did.

I enjoyed it, it lifted my spirits, I was feeling good, excitement, I was ringing the bell and waving my hands and saying hello to everyone who passed by, and they smiled with me and I smiled with them, it was quite sociable

Passers-by and drivers often responded with delighted curiosity:

It was just so exciting, I was like a little child! It's one of those bikes which attracts attention from the general public, they don't see these bikes on the streets every day, so we feel more important.

And the attention that we got! This could be an easy way for the local community to get to know us, because it's such an unusual bike it makes people stop and look. I've talked to all my friends about it.

One of the pilots also highlighted the importance of “making passers-by smile and engage with us.”

This positive visibility and feeling of connectedness with local communities is integral to wellbeing and good mental health, but it can often feel out of reach to isolated older and disabled people as well as those who care for relatives (Emerson et al, 2021; Fakoya et al, 2020). A number of carers emphasised how much they appreciated this social connectedness:

We've had fantastic responses from members of the public when we ride past, other road users have beeped their horns or tooted as we've gone by, it's always been a positive experience.

The public seemed to pick up and reflect the mood of the cyclists, for example, on a ride where the participants were trying to "go faster and faster", the public responded in kind:

At one point we were going past a bystander and he joked that the guys at the back aren't pedalling! [laughs]

The visibility of the RSBS cycle draws positive public attention, enabling riders to feel connected to the wider community and supported and appreciated. These warm connections are vital for mental health and wellbeing, especially for those who otherwise face barriers to social participation.

The social connectedness extended beyond human interactions and into the environment. Many of the participants reported a deepened feeling of connection with their local area as a result of the RSBS experience. It enabled them to explore it in a new way or to access areas that they wouldn't normally encounter.

I enjoyed it immensely, we passed a lot of places I wasn't used to, I don't know the area round the back streets, I discovered some new areas

I'm glad I did, it was a unique experience for me, you know. It was positive and it got me out into the area. Even though it was raining it didn't put a damper on things. Really positive.

RSBS extended the boundaries of many participants' worlds, particularly when they had concerns about the limitations of their own or their partners' mobility.



It's really the different environments that we discover through the bikes, near the docks, we wouldn't have ventured over there because we didn't really know it and there's a limit to how far we can go.

Another carer described the joy of being able to access the "main place" of nature and recreation in their area:

A couple of times we went over the Scrubs but we went a different way, and went all round and it was quite interesting. We saw little animals, squirrels, The Scrubs is the only main place around here actually.

In some instances the RSBS journey inspired participants to revisit those places again afterwards:

I think seeing a different place was great. It's not a place I would have known about or would have gone to, but I think I will go there again. [...] Quite excited, and quite exhilarated, seeing different places.

The RSBS journeys connected participants to their local area and communities as well as providing social connections between the riders, and between the riders and pilots. Some of these relationships, between riders and with their local community, continued beyond the RSBS outings and this was particularly important in counteracting the isolation that many had experienced during the pandemic.

### **Access to Exercise & Mobility in a Pandemic Context**

Access to exercise and mobility were often a challenge for many participants and this only increased during the pandemic where many of the facilities or organisations that they relied upon were either closed altogether or introduced practices which rendered them inaccessible.

I used to do an exercise class on Monday mornings, but now we are in lockdown everything is closed, so I try to remember what exercises we used to do and do some of those every day.

I used to go to the swimming pool, which is not far from Sainsbury's in [name of place] – you know, the big Sainsbury's. I used to enjoy swimming, maybe 3 or 4 times a week, unfortunately it's now closed so I have to rely on walking or doing exercise in my own flat to keep fit.

Difficulties with social distancing protocols particularly impacted on blind participants.

I used to do 3 days a week at the gym but because of lockdown I don't do it anymore. So when [name of organisation] said there is a bike ride I said that's really good, because social distancing is impossible for a blind person to do in a gym. I stopped my membership since March and pretty much I was doing exercise at home and sometimes walk outside with a friend of mine so [the] bike ride was great, I said let me do that, and in the future I want to do it for the fitness side of things.

COVID restrictions meant that participants were confined at home for exercise, missing out on the crucial wellbeing dimensions of being outdoors and connecting socially with others.

It's the fresh air and being outdoors, in addition to the exercise, just being able to remain outdoors for so long, that was the best thing. That's something we used to do when we used to go on these long walks – 7, 8, 10 mile walks – that we used to do before the pandemic [as part of a group]. Since that happened we haven't really had such a long outdoor session.

It's [e.g. RSBS] been a brilliant experience, and I thoroughly enjoyed it. I physically felt like I had worked out. As I said, during the pandemic I've not been able to do any outdoor exercise, particularly cycling, so from a physical point of view I felt like I had worked out and my legs were a little sore the next day so that's a good sign. And again, during the lockdown I haven't really met anybody new, so the RSBS gave me the opportunity to meet new people as well. So all in all it was fantastic.

The pandemic also created challenges for RSBS as one pilot noted: "COVID has been a challenge with pilots creating a 'safe' environment for them to ride." The safety of RSBS was especially important as many participants continued to avoid public transport because of health concerns: "I avoid the bus because a lot of people are not wearing masks". For others RSBS was their first venture back out into the world: "I felt much better and happy to be out after lockdown – this was my first time out."

Access to outdoors and exercise was additionally complicated for those who lack essential resources such as mobility equipment or appropriate accommodation.

We live in a very small 2-bed flat on the 3rd floor, 48 steps up and down and there's no lift. So getting mum up and down is always a challenge. Things would be a lot easier if we were on the ground floor.

I have the windows open a little bit and go out into the garden now and again but not a lot because if I have an accident and fall down out there I won't be able to

pick myself up and no-one would know I'm out there, because I can't get a pendant to go round my neck. I've got one, but I'm only allowed to use it indoors. They are dear. I've tried to get one to go out in the garden but they are £165, it's too expensive.

In challenging circumstances RSBS provided access to exercise and the outdoors at a time when these were particularly limited for disabled and older people.

Another impact of the pandemic was a raft of “pop-up” cycle infrastructure and the introduction of low traffic neighbourhoods (LTNs). However, despite ostensibly being good for cycling, active travel and community connectedness, LTNS were not without their problems (WfW, 2022). In the pilot survey only one respondent reported a unilaterally positive, or “good”, experience of using LTNs. Half reported positive experiences of using LTNs when they could access them, but also that they had encountered difficulties navigating the traffic-exclusion barriers with the RSBS cycle.

Generally good, they are great places to ride, but gaps too narrow for the Van Raam are a real nuisance.

Sometimes the traffic excluding furniture etc is too narrow for a side-by-side trike to fit through.

The cycle can usually fit through the LTN barriers that have been erected. It's nice to cycle in these quiet neighbourhoods.

Others expressed concerns either about the barriers or having to use more major roads to reach an LTN. These experiences highlight the importance of LTNs being fully accessible to the full range of cycles in order to ensure that the whole population, especially those who are experiencing social isolation, can access them and enjoy the physical, mental and social health benefits of cycling in safe, quiet streets, as this participant highlights:

The traffic worries went out of my head, because we didn't go on any main roads, I felt very safe, enjoyed the fresh air, ability to ring the bell, meet people, with [carer] by my side, I felt much better and happy to be out after lockdown – this was my first time out.

### **Pilots' Skills & Experience**

The pilots featured strongly in the riders' accounts of their RSBS experiences although none of the questions asked directly about them. Pilots were appreciated socially (above)

and frequently praised for making participants feel safe, supported and understood. Feeling safe was particularly important for those who felt nervous prior to their initial ride and the speed at which they felt at ease with the pilots is noteworthy.

[I] felt tired but good [afterwards], and this is something I can do, it felt comfortable and safe, and good that somebody else was in control.

[It was] very well organised and controlled throughout, a good experience, I felt safe and will remember this experience for a long time, I was very happy.

I felt totally safe, I felt that if I had any issues I could tell the pilot. The pilot was constantly checking, "Are you ok?" which was quite nice, and giving clear instructions in the sense that there's going to be a roundabout coming, or turning left or right, so you know what's coming up and you are given the right amount of information, so I absolutely love it.

The pilots were sensitive and alert to the riders' individual circumstances and accommodated their needs without hesitation, enabling a diversity of participants to take part.

I can't cope with certain things, so she [the pilot] wanted to get to know me before she brought other people with us. [...] As soon as I met the pilot she put me at ease and I was fine, it was great.

As noted above, pilots regularly provided an "audio description" of the surroundings for blind and visually impaired participants, as well as in some instances enabling them to take charge and pilot the cycle themselves, demonstrating a level of sensitivity and respect for people's abilities which was much appreciated.

[I want to] thank all the pilots for doing what they do to make it such an enjoyable experience. I mean, you know, when we were there, how we were having a laugh and chatting and [the pilots] were giving us a go at piloting, and all the pilots have done that so it's been fantastic!

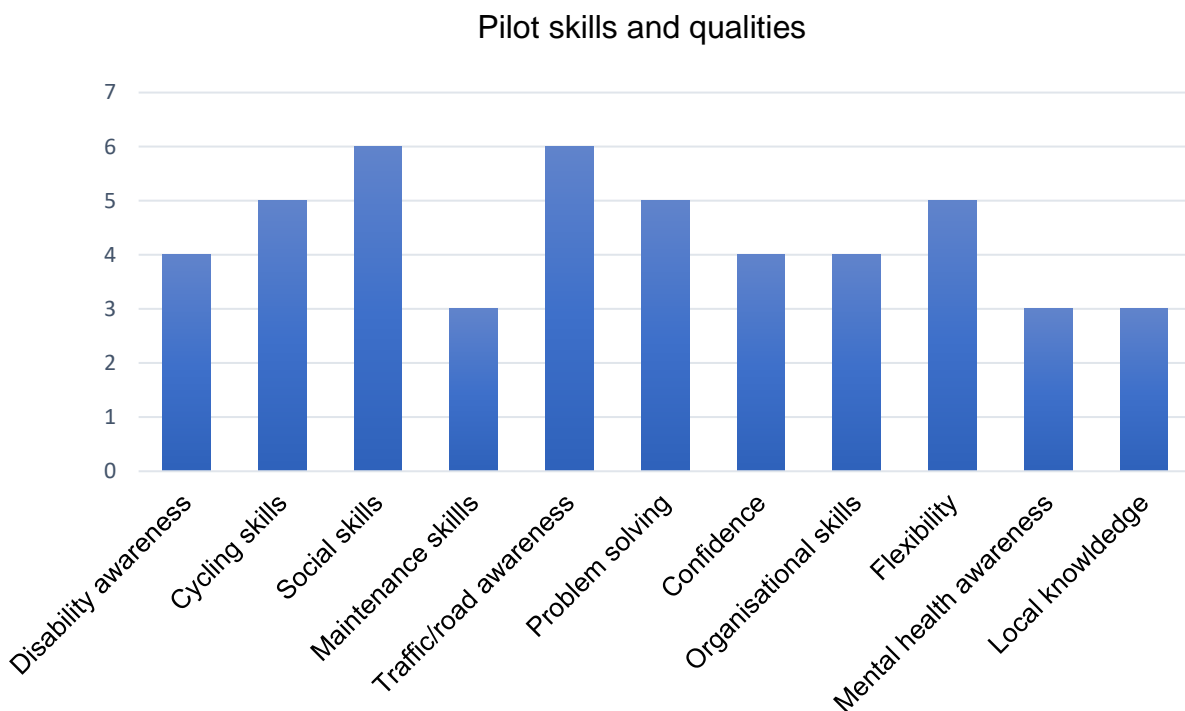
She [the pilot]'s very entertaining, charming and knowledgeable. [...] It was a nice social experience as much as it was to get me moving. Basically I was handled really well and [name] explained a lot about it and she was very chatty.

Two carers also highlighted the sensitivity and awareness of the pilots:

They were just really accommodating [...] A combination of things, the understanding of [name of pilot] and the other lady [e.g. another pilot] (whose name I've forgotten) of our situation, asking us if we're going too slow or if the speed was ok; asking mum if she was alright all the time; going out of their way to show us flowerbeds and the Japanese House near the boating lake; birds and things; that was really helpful. Their understanding of who we were and what our needs were, were fully taken into account, and that transpired with my mum smiling away like a Cheshire Cat. [...] They were caring, very understanding.

The pilot was great, it was [name] and we've also had [name], and they have both really got fantastic road sense, awareness of older people, very sensitive about how to support them, they just have a very good understanding and manner about them. We had good weather and a really good ride, it felt very safe and secure and was very enjoyable. A delight to the people that I'm supporting. Every time we've been out on a cycle ride, whether it's service-users or my mum, they've always been delighted. Brilliant!

The pilots' skills and sensitivity are integral to RSBS being a fun and accessible experience for riders who may have a range of complex needs and circumstances. The combination of both social and practical skills e.g. road sense and understanding of people's needs was also recognised by the pilots themselves as crucial to their role. Survey question eight asked the pilots to select the characteristics that they felt were most important for a RSBS pilot, and all of the pilots cited both social skills and traffic/road awareness as the most important.



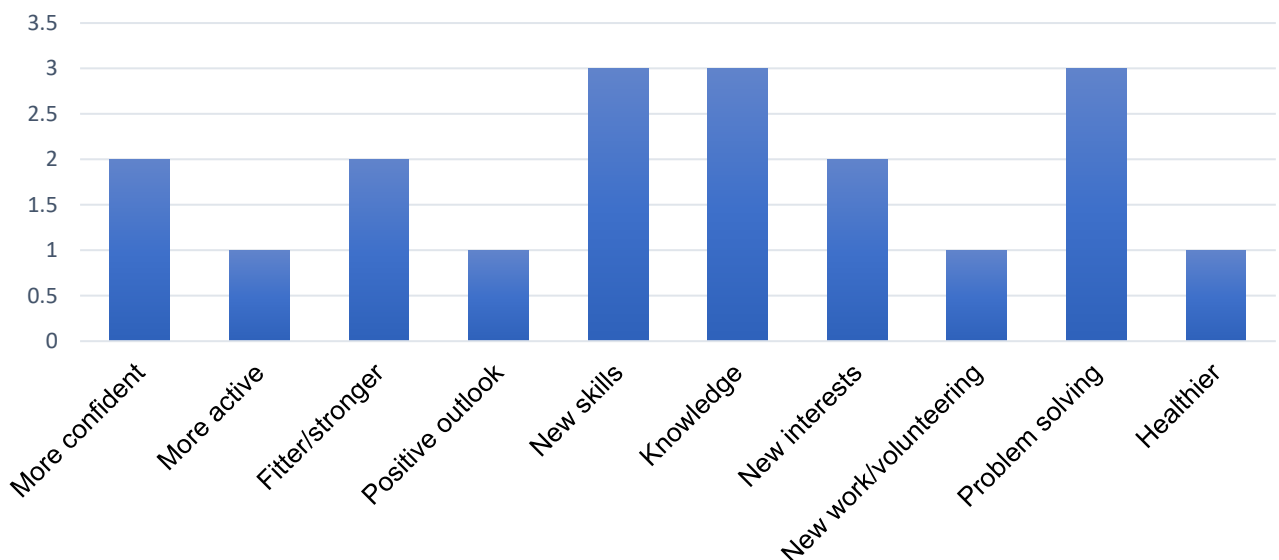
Five out of six pilots also highlighted flexibility, cycling and problem-solving skills as essential characteristics. At least half of the pilots also felt that disability and mental health awareness, local knowledge, organisation and maintenance skills were also important. Two pilots made free-text comments which additionally highlighted personal disposition or state of mind:

Enthusiasm to make a difference to someone’s day.

Experimenting mindset, explorer mindset, good knowledge of the roads in the area.

Although social skills and disability awareness can be learned, there is something striking about the authenticity with which the pilots approached their riders, forming relationships which seamlessly merged their supporting “professional” components with genuine appreciation and interest. This is perhaps explained by the disposition of those who are drawn to this role. All (100%) of the pilots cited working with people, helping others and being out doors as their favourite aspects of the job. 5/6 also listed making a difference, cycling and exploring new areas. The pilots’ experiences prior to working on the RSBS project reflected these characteristics: 5/6 had done similar paid or voluntary work and all six had some previous experience in working withing the cycling sector. These skills, experiences and attributes are integral to the success of the service and the overwhelmingly positive accounts given by the RSBS participants.

Impacts of Piloting Experience



All of the pilots (100%) agreed that they noticed changes in themselves as a result of working on the RSBS project. Half of the pilots felt they had developed new skills and knowledge and were better at problem-solving as a result of working on RSBS. Others also identified feeling more confident, active and positive as well as being fitter/stronger and healthier. The pilots described their personal development in terms of what might be framed as the helping and improving elements of the RSBS service: “Supporting others to try something new” and “a sense of doing something really useful”. Pilots also reported “resilience” and increased “confidence and human connection” as important dimensions of their role. Indeed, in their free-text responses to the request any final comments, two pilots suggested that they benefitted as much as the participants: “I think I enjoy it as much as the clients!”

Pilots also reported improved disability awareness, appreciation for individuals’ self-determination, and the wide-ranging mobility functions of cycles.

I’ve learnt how positive people are despite the difficulties they’ve had to overcome. They are determined to try new things and experience new places as they are looking to enjoy life as much as anyone else.

More aware of the range of disabilities and how most can be overcome by bicycles.

The pilots’ skills and characteristics are integral to the success of RSBS, the combination of an authentic interest in the riders as individuals, a sensitivity to their circumstances and a range of practical and road skills ensured that the journeys were positive, safe and uplifting for the participants. That the pilots also experienced a number of benefits themselves only underscores the wider health and wellbeing impacts of RSBS.

### **Aspirations & Challenges for RSBS**

Participants’ (and pilots’) experiences of RSBS were overwhelmingly positive, and many wanted to make increased use of the service.

I’d like to do it every week, in an ideal world every day, every morning!

Want to do it every day and recommend to others.

I loved it, there’s not much I can really add. I really, really enjoyed it, I found it very entertaining, enjoyable, relaxing, I thought it helped with a bit of exercise.

[...] As long as I'm on that bike I'm happy to go to the moon! [...] Every day all day! Any journeys, I'm not too fussed. Anything that includes that side-by-side and the friendly pilots, I'm happy to do whatever. Whatever the distance. Any type of journey.

For those who were working, evening and weekend sessions would be key to enabling them to continue to participate. This is particularly important given that many people remain working from home which can be a socially isolating experience, especially for those who face additional barriers to exercise, outdoor activities and social participation.

It would be useful if at least on one of the days one of the rides could be offered around 5 to 7 pm for people who are working and unable to take time off during the week. [...] Weekends as well.

Longer and varied journeys were also popular requests.

I personally would prefer things to be different each time, because then there is no repetition, so one time we can go to a flat area and another time somewhere a bit more hilly, and that just adds a bit of variety to it and makes it a little bit more exciting, like I wonder what's coming up now.

One of the pilots also felt that varied excursions and journeys that had a purpose beyond leisure rides were important in addition to off-road leisure rides. Because, whilst parks made for easier riding,

I find the project really interesting when it becomes "a taxi" more than an activity where we're just doing loops in parks. It gives a different purpose and shows how you can integrate cycling to your daily life.

Many participants expressed a similar desire to be able integrate RBSB into practical daily journeys, not only to meet current day-to-day obligations, but also to allow them to participate in a wider range of activities.

Being able to do the shopping quicker as well would be quite good, because at the moment I have to walk to the shop or my wife and I go in the car. It would be much nicer to go on the bike.

In an ideal world I would like to do it at least twice a week. And the kind of journeys I would make – I'd go to a temple near me, I'd ask the pilot if they could take me to the temple, then I would quickly go in, come out and continue my ride.



And for my second session I'd like to do a proper session in a park doing serious cycling if you see what I mean, where I'm getting a proper workout rather than doing chores. So if I was doing two sessions, then one focused on chores and one focused more on health.

Our plan was to be able to go to the pharmacy, instead of labouring to get there we make it a bit more fun [with the RSBS cycle]. It could be that or some other things we do regularly that are close by [...] maybe a visit to the GP and the swimming pool at [name of place], that's a nice ride along the canal.

Participants reported very few negative experiences even when directly prompted and, when they did, the weather featured strongly.

The fact that with the RSBS you can get wet when it's raining. If the weather's good it's great, when the weather's bad it's not so great.

It was pouring rain.

I would like to say what could be done about the bikes – they could have some poles up with some kind of canopy over the top for a rainy day, rather than the ponchos. Something foldable.

Pilots also cited “Going out in all weathers” as a challenge for participants as well as admitting that “cold, wet weather” and “heavy rain” were sometimes challenging for them as well. Another challenge identified by both the participants and the pilots were occasional issues with the pedals not being suitable for all of the riders or needing additional features such as straps (which are now in place).

I need to have different types of pedals [in order to be able to pedal]

There's only one problem which is that the pedals didn't have a strap on them to keep my foot on which was necessary so we went and got one but it was difficult.

We were planning to go to [name of place], but we couldn't make it because there was an issue with the [foot] straps which has been resolved since because they've bought special straps.

Pilots also highlight that issues with the pedals could also be exacerbated by wet weather and the poor-quality roads in some areas:

Bumpy roads of London, slippery pedals as soon as it gets wet (especially for blind people who have a hard time to find the pedals again).

Participants and pilots reported very few difficulties with RSBS, and where they did, these usually related to the weather, or a technical feature with the pedals which has since been resolved. Participants were keen to have more frequent access to RSBS, to use it multiple times a week – including during evenings and weekends – and for a variety of journey types including leisure and exercise as well as essential day-to-day journeys. There is clearly significant unmet demand and potential for expansion of the RSBS service, particularly amongst the groups who face the highest barriers to health, mobility and social connectedness and who risk being left behind in the post-pandemic recovery (see, Health Foundation, 2021).

## **Conclusions & Recommendations**

RSBS provides access to mobility, independence and physical activity for those who face significant barriers to them, particularly older and disabled people and carers. The physical exercise coupled with the social and supportive context of the RSBS service had significant mental and physical health impact for the participants. These are particularly important given that the older and disabled people tend to have some of the poorest health outcomes of any population group and often face the greatest barriers to redressing them. Additional wellbeing benefits arose from spending time outdoors and the sense of achievement gained from participating in RSBS. The social element was also important for mental health and wellbeing. Participants and pilots reported four aspects of social connectedness: relationships between riders, relationships between riders and pilots, connecting with the wider community and connecting with the environment. Disabled and older people and carers often experience chronic social isolation which compounds poor mental and physical health – all of which were exacerbated by the pandemic which left many participants isolated indoors and immobile for months on end. In this context, and beyond, the RSBS service is uniquely placed to offer access to exercise, physical and mental health and wellbeing and social connectedness to the groups who are most disadvantaged in this regard.

The role, skills and characteristics of the pilots are an essential ingredient in the success of the RSBS service. Pilots balanced the social and practical dimensions of their role with equal skill and connected with participants in authentic ways. The data identifying the core skills and attributes of the pilots will enable RSBS to retain its high level of service delivery and assist in recruitment as the service develops and expands. Indeed, increased access to a wide variety of opportunities including leisure rides, taxi services and evening and weekend sessions were aspirations for many participants and pilots and, given the positive impacts of the service, it is easy to see why this is the case.

Overall then, RSBS provides unique and essential access to mobility, exercise, mental and physical health and wellbeing and social contact for groups who not only face significant barriers to these but also risk being left behind in the post-pandemic recovery. Disabled and older people and carers benefit enormously from the service and the recommendations focus on expanding the availability of the service as well as the participant groups who will benefit from it.

## **Recommendations**

- Continue to work with key current participant groups e.g. older and disabled people
- Explore working with organisations/groups for people with mental health needs
- Explore working with carers organisations
- Explore working with organisations/groups working to combat social isolation and loneliness
- Ensure that health and social prescribing projects – public health and active travel/transport focussed – establish pathways to RSBS
- Expand service so it is available during evenings and weekends
- Expand service so there is a wider range of leisure and taxi rides available

Clearly these recommendations require significant resourcing, but given the emphasis in current government policy on access to active travel, particularly for those with protected characteristics (e.g. Gear Change (DfT, 2020), RSBS is meeting key government aims. Similarly, the public health focus on physical activity as both a preventative and health promoting measure is also clearly achieved through the RSBS service. RSBS is uniquely placed to meet key government targets in improving the health and wellbeing and increasing active travel and community connectedness amongst groups who risk being left behind. As such, resourcing the expansion of the service to increasingly serve target groups should be a priority.

## References

- Department for Transport (DfT) (2020) [Gear Change: A Bold Vision for Cycling and Walking](#). London: Stationary Office.
- Emerson, E; Fortune, N; Llewellyn, G; Stancliffe, R (2021) [Loneliness, Social Support, Social Isolation and Wellbeing among Working Age Adults With and Without Disability: Cross-Sectional Study](#). *Disability & Health Journal*, 14(1): 1-7
- Fakoya, OA; McCorry, NK; Donnelly, M (2020) [Loneliness and Social Isolation Interventions for Older Adults: A Scoping Review of Reviews](#). *BMC Public Health* 20(129): 1-14
- Health Foundation (2021) [Unequal pandemic; Fairer Recovery](#). London: Health Foundations
- Inckle, K (2020) [Disability, Cycling & Health: Impacts and \(Missed\) Opportunities in Public Health](#). *Scandinavian Journal of Disability Research*, 22(1): 417-427
- NHS (2021) [Exercise on Prescription](#).
- Wheels for Wellbeing (WfW) (2022) [Disability & Cycling: Report of National Survey](#). London: WfW.

## Acknowledgements

Heartfelt thanks to the RSBS participants who took the time to share their experiences with such candour and detail for this evaluation report. Thanks also to the pilots who made space in their busy schedules to reflect on their experiences and complete the surveys. Finally, thanks to all of those who have been involved in making the RSBS project such a success – long may it continue into the future!

## Appendix

### Ride Side-by-Side (RSBS) Consent Form

Thank you for coming to the RSBS session today, we hope that you have a great experience. Before the session please complete this form.

This is an agreement between Bikeworks CIC and the undersigned. It relates to all RSBS activities run by Bikeworks on or after the date of this agreement. This information will be stored by RSBS and used in accordance with the preferences you indicate below and your rights under data protection law.

Please read and tick the statements you agree with.

This is my first RSBS session:                      yes                       no

I understand that Bikeworks CIC is not responsible for any injury or any loss or damage to any property which is not caused by an instructor's negligence and that Bikeworks CIC have no responsibility for any injury.

I understand that this session does not constitute cycle training, and does not equip me with the skills necessary to ride a bicycle.

Please note any medical conditions or other information that may be relevant:

Research permission: Bikeworks and its partner organisations may wish to contact you for research which will be help us to continue RSBS projects.

I give permission for Bikeworks and its partner organisations to contact me for research.

Contact number: \_\_\_\_\_

Photo permission: Bikeworks and our partner organisations request your permission to use photos (or video) of you in the RSBS session for publicity or promotional purposes.

I give permission for photos or video of me to be used for the purposes stated above.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Print name: \_\_\_\_\_

Emergency Name and Contact Number: \_\_\_\_\_

\_\_\_\_\_

**RSBS: Participant Information [demographic data]**

Thank you for completing this form. The information you provide is anonymous. It is your choice whether or not to complete it, and it will not affect you participating in RSBS activities. We will use this information to help us to understand who is benefitting from RSBS, to write reports and seek more funding. By completing and returning this form you consent to providing this data for our use. Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Is this your first session with RSBS? (please circle)                      yes                      no

If no, how many have you attended including this one (state number): \_\_\_\_\_

1) Age (please circle)

- 18-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70-79
- 80 or over

2) Sex/gender (please circle):      male                      female                      non-binary                      trans

3) Occupation (current or former, please state): \_\_\_\_\_

4) Health, disability or mobility issues (please state): \_\_\_\_\_

5) Ethnicity (please circle):

White

- English / Welsh / Scottish / Northern Irish / British
- Irish
- Gypsy or Irish Traveller
- Any other white background (please state): \_\_\_\_\_

Mixed / Multiple ethnic groups

- White and Black Caribbean
- White and Black African
- White and Asian
- Any other Mixed / Multiple ethnic background (please state): \_\_\_\_\_

Asian / Asian British

- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background (please state): \_\_\_\_\_

Black / African / Caribbean / Black British

- African
- Caribbean
- Any other Black / African / Caribbean background (please state): \_\_\_\_\_

Other ethnic group

- Arab
- Any other ethnic group (please state): \_\_\_\_\_

## Interview Questions: First time participants

Hello, my name is [-----] I'm contacting you from RSBS. You said that you would be happy to be contacted after your session to talk about your experience for our research. Is this a good time to have a chat? [If not, when?]

Thank you. I will ask you some questions and I will be audio recording our conversation. It will be typed up and the recording will be deleted. No information that identifies you, including your name, will be typed up. The information that you provide will be used to write reports and give presentations about RSBS and apply for funding for more sessions.

Your answers won't affect whether or not you can use RSBS again and you can change your mind and not answer any questions that you don't want to.

Do you have any questions?

Are you still happy to participate in this research?

[Start recording now. When the conversation is being typed up please identify by: F(female), M(male), O (other/unsure) and a number e.g. F2 making sure each transcript has a different code.]

Thank you! First of all, I'd like to know about the session you attended:

- How long was your session?
- How far did you go?
- Did you go somewhere specific (and where was that)?
- How did you find out about RSBS?

Now I'd like to hear a bit more about you and your experiences of the session:

- How do you usually move around?
  - How easy do you find it to move around and make the journeys you want?
- What type of trips do you make?
  - Are there trips that you would like to make but don't? Please tell me about them.
- What exercise do you take, and how often?
  - Would you like to exercise more or do other kinds of exercise and what stops you?
- Can you tell me how you were feeling just before the ride?
- How did your RSBS experience make you feel during the ride?
- Did you pedal? [ask why]
- How did you feel after the ride? [NB: prompt about how they felt physically if they had pedalled and how they felt 'in themselves' e.g. the social and mental health aspects]
- What did you enjoy most and why?
- What did you enjoy least and why?
- Will you book another trip?
- Is there anything else that you'd like to tell us?



## Interview Questions: Repeat participants

Hello, my name is [-----] I'm contacting you from RSBS. You said that you would be happy to be contacted after your session to talk about your experience for our research. Is this a good time to have a chat? [If not, when?]

Thank you. I will ask you some questions and I will be audio recording our conversation. It will be typed up and then the recording will be deleted. No information that identifies you, including your name, will be typed up. The information that you provide will be used to write reports and give presentations about RSBS and apply for funding for more sessions.

Your answers won't affect whether or not you can use RSBS again and you can change your mind and not answer any questions that you don't want to.

Do you have any questions?

Are you still happy to participate in this research?

[Start recording now. When the conversation is being typed up please identify by: F(female), M(male), O(other/unsure), R (repeater) and a number e.g. FR5 making sure each transcript has a different code.]

Thank you! First of all, I'd like to know about the last session that you attended:

- How many times have you attended RSBS?
- How long was your most recent session?
  - Was that different to your previous session/s? How/why, and how did you feel about that?
- How far did you go in your most recent session?
  - Was that different to your previous session? How/why, and how did you feel about that?
- Did you go somewhere specific (and where was that)?
  - Was that different to your previous session/s? How/why, and how did you feel about that?

Thank you. Now I'd like to hear a bit more about your experiences of using RSBS:

- What did you remember most about your previous experience?
- What was your main reason for booking another trip? [NB: they might already have answered this in the question above, if so don't ask]
- Were you with the same people this time and how did you feel about that?
- Did you have the same pilot this time and how did you feel about that?
- Can you tell me how you were feeling just before the ride? [prompt to explore if this was the same or different than previously and why]
- How did you feel during the ride? [prompt to explore if this was the same or different than previously and why]
- Did you pedal? [prompt to explore if this was the same or different than previously and why]
- How did you feel after the ride? [NB: prompt about how they felt physically if they had pedalled and how they felt 'in themselves' e.g. the social and mental health aspects and whether or not these have increased/improved since the previous experience]

- What did you enjoy most about this session and why? And was that the same as your previous experience/s?
- What did you enjoy least and why? And was that the same as your previous experience/s?
- Would you prefer your RSBS session to be the same or different each time and why? [They might have already answered this above, if so don't ask]
- In an ideal world how often would you use RSBS and what kinds of journeys would you make?
- What difference do you think being able to use RSBS like that would make to your life [prompt for physical health, social connections and wellbeing/mental health e.g. how you feel 'in yourself']
- What do you think stops your ideal scenario happening? [prompt for kinds of roads/traffic etc]
- Even though it's not an ideal world will you book another trip?
- Is there anything else that you'd like to tell us?

## RSBS Evaluation: Survey for Pilots

Bikeworks have asked Dr Kay Inckle to evaluate the RSBS project and would appreciate you completing this survey. Completing this survey is entirely voluntary. All answers are anonymous and no information that identifies you will be saved. The information that you provide will be collated and may be used to write reports, presentations, training and promotional material about RSBS and/or apply for funding for more sessions. Please return the completed survey to [kinckle@yahoo.com](mailto:kinckle@yahoo.com)

- Please tick to confirm you have read, understood and agree to complete the survey

1) How long have you been a pilot for RSBS? \_\_\_\_\_

2) How did you first find out about RSBS? (please circle your answer)

Friend            Colleague            Website            Advert            Other volunteering            Work  
I was formerly a participant            I previously volunteered            Social media

Other (please state): \_\_\_\_\_

3) Had you done similar work paid or voluntary before?            **YES / NO / DON'T KNOW**

3a) Please give details: \_\_\_\_\_

3b) How does that equip you for this role? \_\_\_\_\_

4) How often do you pilot RSBS sessions? \_\_\_\_\_

4a) Is this: the **right amount / not enough / too often**? (delete as appropriate)

5) What is your favourite aspect of piloting RSBS sessions? (please circle – you can pick more than one)

Working with people            Cycling            Making a difference            Helping others  
Being outdoors            Exercise            New skills            Exploring new areas            Challenge

Other (please state): \_\_\_\_\_

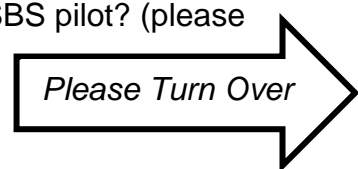
6) What do you think are the most important things that the participants/passengers get out of a RSBS session? (please circle – you can pick more than one)

Exercise            Social contact            Wellbeing benefits            Being active  
Trying new things            Mental health benefits            Completing a Journey  
Completing a practical activity            New experience            Meeting new people  
Physical health benefits            Something to do            Building confidence            Joy

Other (please state): \_\_\_\_\_

7) What, if anything, do you think is a challenge for participants? \_\_\_\_\_

8) What do you think are the most important skills and qualities for a RSBS pilot? (please circle – you can pick more than one)



Disability awareness      Cycling skills      Social skills      Maintenance skills  
Traffic/road awareness      Problem solving      Confidence  
Organisational skills      Flexibility      Mental health awareness      Local knowledge  
Other (please state): \_\_\_\_\_  
\_\_\_\_\_

9) What do you enjoy most about being a RSBS pilot? \_\_\_\_\_  
\_\_\_\_\_

10) What, if anything, do you like least about being a RSBS pilot? \_\_\_\_\_  
\_\_\_\_\_

**11) Have you ever had a difficult experience as a RSBS pilot?      YES / NO**  
Please give details: \_\_\_\_\_  
\_\_\_\_\_

11a) Is there anything that you can think of that would prevent this happening again? \_\_\_\_\_  
\_\_\_\_\_

12) What has your experience of LTNs (low traffic neighbourhoods) been? \_\_\_\_\_  
\_\_\_\_\_

13) If you compared yourself now to before you started piloting can you see in any changes in yourself?      **YES / NO / DON'T KNOW**

13a) Please circle which, if any, apply (you can pick more than one):  
More confident      More active      Fitter/stronger      Positive outlook      Optimism  
New goals/aspirations      New skills      Knowledge      New interests  
Taking on other work/volunteering      Social skills      Problem-solving      Healthier  
Other (please state): \_\_\_\_\_

14) What is the most important thing you have gained from being a pilot? \_\_\_\_\_  
\_\_\_\_\_

15) Is there any training, knowledge or experience that would have been useful when you began your role as a pilot?      **YES / NO / DON'T KNOW**  
Please give details: \_\_\_\_\_  
\_\_\_\_\_

16) Is there anything else you would like to say about your experience of being an RSBS pilot? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Thank you for completing the survey!**