



## Fix Your Bike Voucher Scheme Evaluation

on behalf of the Department for Transport

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Report authors: Sally Cairns and Beth Hiblin, Transport for Quality of Life; Tom Cohen, University of Westminster

Principal analyst: David Fevyer, University of Westminster and Sustrans

Contributing researchers: Katherine Bartlett and Dawn Rahman, University of Westminster

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## Definitions used in this report

**Voucher applicant:** those who completed the initial registration survey to apply for a voucher.

**Voucher user:** survey respondents who reported that they had used a voucher and non-survey respondents recorded in the Energy Saving Trust (EST) database as likely to have used a voucher.<sup>1</sup>

**Voucher non-user:** survey respondents who had not yet used a voucher at the time of the survey and non-respondents recorded in the EST database as not having used a voucher.

Survey respondents who reported that they 'did not know' whether they had used a voucher were coded as a user or non-user according to the EST database.

**Voucher redemption:** the situation when a voucher had been submitted by a cycle repairer, and they had been paid for the work undertaken.

**Occasional cyclist:** those cycling less than once a week.

**Regular cyclist:** those cycling at least once a week.

**Frequent cyclist:** those cycling three or more times a week.

Survey respondents were classified as occasional or regular cyclists according to their recall of how often they were cycling at the time of applying for a voucher.

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<sup>1</sup> Energy Saving Trust provided the evaluation team with registration data (September 2021) in which voucher applicants were coded as a 'voucher user' if a shop had put in a claim to EST for voucher use at that time. This was the case even if the voucher claim was subsequently rejected. Conversely, some survey respondents would have used their voucher after the registration data were received, but before completing the survey. For these reasons, the survey respondents' own assessment of whether they had used their voucher is treated as the primary information.

# Executive summary

## Introduction

This report summarises an evaluation of the Fix Your Bike voucher scheme, which involved the release of 400,000 £50 vouchers to members of the general public, to be used for cycle repair or service. Vouchers were issued in four batches between July 2020 and April 2021. The evaluation has used interviews and surveys to assess:

- Whether the scheme succeeded in its aim of **increasing the number of people cycling**.
- Whether the scheme **prompted people to take more short journeys by cycle than by private car**.
- Whether any changes in cyclist numbers or modal shift **lasted beyond Covid-19 lockdown measures**.
- **Lessons learnt** from how the scheme was delivered.

## Did the scheme increase the number of people cycling?

There were voucher applicants from all demographic groups and all parts of England. The scheme was effective in attracting people who did little or no cycling: over a third of those applying (35%) said that, 12 months before they applied to the scheme, they had been cycling less than once a week, including 6% who said that they never cycled at that time.

Slightly under half (46%) of those who applied for a voucher went on to use it. Looking just at these 'voucher users', it remains true that the scheme benefitted people who did little cycling, with 43% saying they were cycling less than once a week at the time of applying. Participating businesses stated that they thought the scheme had attracted new customers.

About 37% of voucher users said that they had not paid for cycle repairs or servicing before. Only 29% of voucher users said they were 'likely' or 'very likely' to have got the work done if they had not received a voucher.

Taken together, this evidence suggests that, as well as attracting existing cyclists, the scheme attracted people who had previously been only occasional cyclists, or non-cyclists, who would not have otherwise got work done on their cycle.

To understand the impacts of the scheme, the behaviour of voucher users was compared with that of voucher applicants who did not go on to use a voucher, treating the latter group as a 'control' for what would have happened without the scheme.

At the time of applying, on average, voucher users were cycling slightly *less* than non-users. By October 2021, when the follow-up evaluation survey was conducted,



voucher users were cycling *more* than non-users according to a range of questions, as follows:

- 73% of voucher users reported that they were, on average, cycling at least once a week – compared to 56% of non-users.
- In the seven days before the survey, 64% of voucher users had cycled – compared to 47% of non-users.
- 66% of voucher users reported that, since applying for a voucher, there had been a period of time when they had cycled more than they did when applying – compared to 33% of non-users.
- 57% of voucher users reported that, at the time of the survey, they were cycling ‘more’ than when they applied for a voucher – compared to 24% of non-users.
- 24% of voucher non-users reported that, at the time of the survey, they were cycling ‘less’ than when they applied for a voucher – compared to 7% of users.

Differences in reported cycling behaviour between voucher users and non-users were greater for those who had been cycling less than once a week at the time of applying for a voucher.

Comparing average cycle trip numbers being reported in the seven days before the survey, there was a statistically significant difference of 0.9 more cycle trips per person per week for voucher users, compared to voucher non-users.

All survey respondents who were cycling either ‘more’ or ‘less’ since applying for a voucher were asked about all the reasons why this was so. Bike repair (or disrepair) was a main factor. In interviews, the vouchers were often described as having catalysed or enabled a change that was happening for multiple reasons.

## Did the scheme prompt people to replace short car journeys with cycling?

About 90% of applicants had access to at least one car, with half having access to two or more. When applying, 39% of applicants indicated that their main intended purpose for using their repaired cycle would involve replacing car trips with cycle use.

In the follow-up survey, 53% of voucher users reported that they had started cycling for some trips previously made by car or van, compared to 27% of non-users. Voucher users also reported that, in the previous week, they had cycled for an average of 8.9 miles that they would previously have driven. The equivalent distance reported by voucher non-users was 7.0 miles, a statistically significant difference of 1.9 miles.<sup>2</sup>

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<sup>2</sup> The average distances calculated included zero miles for all respondents who, in the previous seven days, had not cycled for any journeys that they would previously have driven.

## Did any changes last beyond Covid-19 lockdown measures?

The follow-up survey took place 16 months after the first vouchers were issued. Analysis of two measures of cycling behaviour by length of time since voucher use suggests that changes in cycling behaviour lasted beyond the Covid-19 lockdown period, and were largely sustained by the time of the follow-up survey.

### Lessons learnt

The findings from the evaluation offer some lessons for future schemes.

Participation in the scheme could be encouraged by providing vouchers on a rolling basis and enabling unused vouchers to be reallocated.

It is important that terms and conditions explain clearly whether vouchers can be used for servicing (as well as repair) and that businesses are fully aware of any requirements before participating.

A £50 voucher valid for three months was sufficient for most people. However, business interviewees also suggested that higher value vouchers might be suitable for those with specialist cycles (such as e-cycles). Both businesses and voucher users suggested that it might be appropriate to allow vouchers to be used for cycle safety equipment or towards the cost of a replacement cycle.

Targeted marketing might help to increase the participation of under-represented socio-demographic groups, such as those living in more deprived areas.

Prior engagement with the cycle industry (including large retailers) would provide time for businesses to sign up to any scheme and to pre-order stock and plan staff resources to cope with increased demand. It is beneficial for voucher users to be able to choose from a range of different types of cycle repairers (e.g. large retailers, smaller and specialist cycle shops and mobile cycle mechanics).

At the time of applying, it would be beneficial for voucher applicants to be given information about typical costs of different types of repair and service, so that they have realistic expectations of what the voucher will cover. Information should also be provided to voucher applicants about how each repairer will deal with work covered by the scheme: for example, whether they will carry out a full bike assessment and quote for all repairs they consider necessary as one package; or whether they are able to carry out smaller repairs.

The high levels of satisfaction with the scheme, and the impacts reported, suggest that it was a popular and effective way of increasing cycling and reducing car use.

# 1. Introduction

## 1.1. The Fix Your Bike voucher scheme

The Fix Your Bike voucher scheme offered vouchers of £50 to enable anyone in England to get an unused bike repaired.

The scheme was launched during the Covid-19 pandemic, when there was increased interest in cycling as a means of travel that enabled social distancing.

The Department for Transport (DfT) appointed Energy Saving Trust (EST) to administer the scheme. EST recruited service providers to carry out servicing/repair work for voucher users; managed the application process; issued electronic vouchers; managed claim, verification and payment processes; and provided information to participants about how to use a voucher, including a telephone support line. More details of how the scheme worked are given in Chapter 3.

The first 50,000 Fix Your Bike vouchers were released in July 2020 and were fully taken up within hours of release. A second issue of 50,000 vouchers in November 2020 was also taken up very quickly. In March 2021, there were two larger issues of 150,000 vouchers each. In April 2021, DfT announced that all vouchers from the fourth wave had been claimed. This marked the point at which the scheme closed to new participants.

## 1.2. This evaluation report

This report describes the findings of an evaluation of the Fix Your Bike voucher scheme. The evaluation was commissioned by DfT in order to understand:

- Whether the scheme succeeded in its aim of **increasing the number of people cycling**.
- Whether the scheme **prompted people to take more short journeys by cycle rather than by private car**.
- Whether any changes in cyclist numbers or modal shift **lasted beyond Covid-19 lockdown measures**.
- **Lessons learnt** from how the scheme was delivered.

## 1.3. Fix Your Bike in numbers

Some headline statistics for the scheme are that:

- 400,000 vouchers were offered across four waves, between July 2020 and March 2021.
- A little under 189,000 vouchers were redeemed by participating businesses by the final deadline of 31 October 2021.



- About 60% of redeemed vouchers were handled by smaller and independent businesses and about 40% were handled by major chain retailers.<sup>3</sup> Halfords dominated this latter category, handling the majority of the vouchers, with Cycle King, Evans, Decathlon and Go Outdoors handling the remainder.
- The average voucher value claimed was £48.60.
- The average cost of repairs/servicing involving a voucher was £75.88. Thus, scheme participants paid an average of £25.88 on top of the value of a voucher for the work done.

The numbers described above provide the best available headline statistics for the scheme. However, the number of repairs and services undertaken is likely to have been somewhat greater than the number of vouchers redeemed. Evidence from EST and interviews with retailers and voucher non-users suggests that some cycles were repaired without the repairer receiving payment for a voucher because:

- Some businesses were not eligible to reclaim the first batch of vouchers or did not have the correct information to process vouchers.
- Some businesses undertook work as a 'loss leader' even if vouchers were not valid (as discussed in Section 11.3.3).

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<sup>3</sup> Based on data analysis in May 2021.

## 2. Methodology

### 2.1. Overview of the methods used

The evaluation of the Fix Your Bike voucher scheme drew on the following sources of information:

- Registration data obtained when individuals applied for a voucher.
- Data obtained via a follow-up survey of those who applied for a voucher.
- Qualitative interviews with voucher users and non-users, and participating businesses.
- Data from a survey of businesses registered on the scheme.

Correspondence with EST, who delivered the scheme, was used to clarify issues. More detail on these information sources is given below.

### 2.2. Registration data

Voucher applicants completed a registration form, providing their date of birth, gender, e-mail address and postcode. The form also asked five optional questions about the condition of their cycle; frequency that they had been cycling 12 months prior to applying<sup>4</sup>; what they would mainly use the cycle for; what mode of travel (if any) it would replace for this main purpose; and whether they were happy to be contacted for future research.

EST supplied usable registration data for slightly under 397,000 people to the evaluation team in September 2021.<sup>5</sup> If a voucher applicant took part in the subsequent online follow-up survey (see 2.3 below), their registration and survey data were linked together. There were some discrepancies between the two data sources as to whether voucher applicants had actually used a voucher. Following correspondence with EST, the follow-up survey was taken as the primary source of information, overriding the registration data where relevant (as explained in the definitions given at the start of this report).

### 2.3. Follow-up survey

An online follow-up survey was conducted, with the main launch in October 2021. Invitations to complete it were sent to all voucher applicants who had agreed to be

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<sup>4</sup> Specifically, applicants were asked “Thinking back to this time last year (before the COVID-19 lockdown), how often would you say you cycled?”

<sup>5</sup> 396,881 people in total. This included people who did not subsequently receive a voucher. Date of birth was converted to the applicant’s age when the scheme commenced. The registered postcode was used to code applicants’ home location by geographical region, rural-urban classification and 2019 index of multiple deprivation decile.

contacted and had provided a valid e-mail address. Slightly under 185,000 people received the invitation, and about a quarter completed it. A total of 45,785 respondents comprise the survey sample for the evaluation.<sup>6</sup>

Significance testing of key results is reported in the text. However, the large sample size means that most other observed differences are also statistically significant.

One limitation of a survey of this type is ‘positive response bias’: people who had a positive experience of the scheme are more likely to respond. About 21% of voucher users (38,511 people) responded to the survey, compared with about 3% of non-users (7,274 people). Survey results referring to ‘all scheme applicants’ are weighted, using a simple scaling factor, to account for this lower response rate from non-users. In most analyses, results for voucher users and non-users are reported separately, and the voucher non-users are treated as a ‘control group’ to show what might have happened to voucher users in the absence of the voucher scheme.

There were some socio-demographic response biases. In particular, people from older age groups were more likely to reply to the survey than those from younger age groups. However, the distribution of such biases was relatively similar for voucher users and non-users, and there was representation from all groups.

More details of the survey process and statistical testing are given in Appendix B.

## 2.4. Qualitative research

In March 2022, interviews were undertaken with:

- Businesses that carried out cycle repair or service work.
- Voucher applicants who used a voucher.
- Voucher applicants who did not use a voucher.

Ten representatives of each group were initially selected for interview via a stratified random sampling technique.<sup>7</sup> Some voucher non-users were found to have benefitted from taking a cycle to a repairer with a voucher, so some reallocation of interview slots took place, which resulted in a total of 13 voucher users and 7 non-users being interviewed. More details about the qualitative interview process are given in Appendix C.

## 2.5. Business survey

A survey of businesses registered on the scheme was carried out by DfT in December 2020 – January 2021, with a 15% response rate amongst businesses registered by that time (260 responses total). Fourteen questions were asked, designed to understand business’ experience of participating in the scheme.

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<sup>6</sup> This excludes respondents to a pilot version of the survey and respondents who answered but withheld their consent to participating.

<sup>7</sup> See Appendix C. Criteria were used to ensure representatives from various sub-groups were included within the sampling frame.

## 3. The scheme and the experience of applying for a voucher

### 3.1. Introduction

This chapter describes how applicants found out about the scheme; people's experience of obtaining a voucher; and whether there was any link between ease of obtaining a voucher and subsequent use.

Initially, a soft launch to the Fix Your Bike voucher scheme was planned, but this was replaced with a prime-time announcement at the daily Covid-19 press conference. The scheme process underwent slight changes during the period it was running, but it was broadly as follows:

- Applicants applied for the scheme online, providing some essential personal information, completing a brief baseline survey and confirming their e-mail address.
- An electronic voucher was issued, with a deadline by which the voucher had to be accepted by a repair/service provider.
- Applicants registered the voucher with a repair/service provider. This committed the applicant to using this repair/service provider.
- Applicants booked the repair/service.
- The work took place and the applicants paid any sum additional to the £50 covered by the voucher.
- The repair/service provider redeemed the £50 voucher (or less, where work did not cost the full value of the voucher), within the redemption deadline.

Process diagrams for applicants and businesses are provided in Appendix A.<sup>8</sup>

Permitted time periods for registering with a provider and getting repairs done varied throughout the scheme, and, for several voucher releases, were extended. Most voucher recipients had somewhere between 4 and 8 months to get their cycle fixed.

Early in the scheme, there was a limit of two vouchers per household (to be used on different cycles). This was later changed to one voucher per person.

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<sup>8</sup> The full process included some additional steps, including tests to avoid fraud. A proportion of vouchers were not refunded because of irregularities of some kind.

## 3.2. Awareness of the scheme

### 3.2.1 Overview of how people first heard about the scheme

Survey respondents were asked how they first heard about the scheme. Results were weighted to represent all applicants. Overall, people heard about the scheme as follows:

- 25% – word of mouth (e.g. from friends, family or colleagues)
- 24% – media articles (e.g. newspaper, news website, television)
- 16% – online advertisements
- 12% – social media posts
- 10% – official websites such as that of the Department for Transport
- 4% – other
- 8% – do not remember

The ‘other’ comments and the qualitative interviews noted the role of cycle retailers and, to a lesser extent, cycling events, newsletters or other publications in raising awareness of the scheme. Several money-saving websites were mentioned multiple times. Some people recalled that they had heard about the scheme via the Government Covid-19 press briefing. In some cases, coming across multiple mentions of the scheme was reported to have led to application.

*“The first I heard about it was on the Covid briefings on BBC1 or something. I then sort of forgot about it and then I heard about it the second time when I went in to [the retailer] to have my bike looked at and they mentioned the Fix Your Bike scheme. That triggered my memory and then I went to look into it.”*

*[Voucher User Interviewee]*

Some of the businesses interviewed had advertised the existence of the scheme to their customers, by emailing their marketing database, featuring it on social media, or mentioning it to customers who came in store to seek out a service or repair. The mass marketing approach was more common among large retailers.

*“I ordered something from [retailer], and I think they had a link to this scheme in the confirmation e-mail, or it might have been on their website.”*

*[Voucher User Interviewee]*

After the first wave of vouchers, a popular money-saving website began publicising the scheme, advertising each new wave of vouchers on its website and social media. This is how several interviewees heard about the scheme.

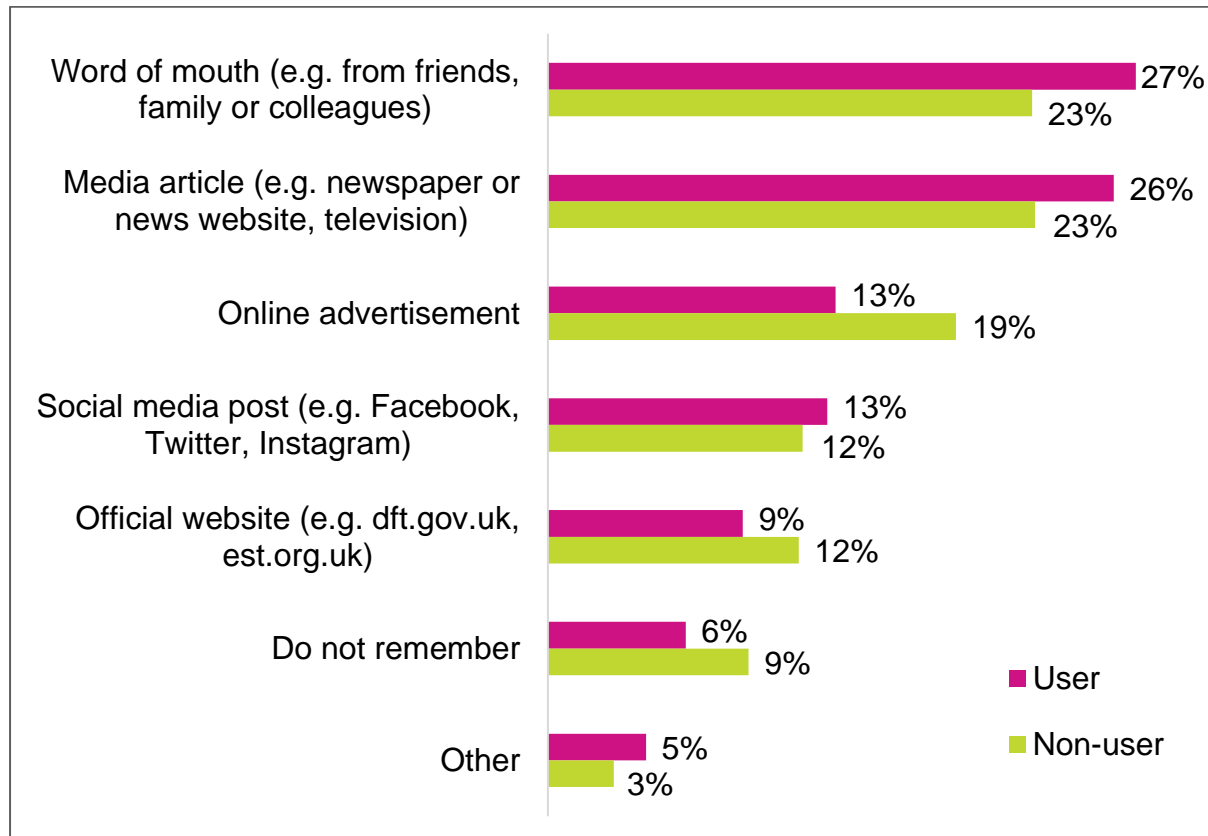
### 3.2.2 How different sub-groups first heard about the scheme

As shown in Figure 1, voucher users were more likely than non-users to report learning about the scheme through word of mouth and media articles (54% compared to 45%), whereas larger proportions of voucher non-users cited online



advertisements and official websites (31% compared to 23%).<sup>9</sup> This suggests one reason that people did not use a voucher: clicking through from online information to the registration site may have required relatively little effort. Consequently, people learning about the scheme through these means may have been more likely to apply just in case a voucher would be useful, rather than because they had a particular need for it.

**Figure 1: How users and non-users first heard about the scheme**



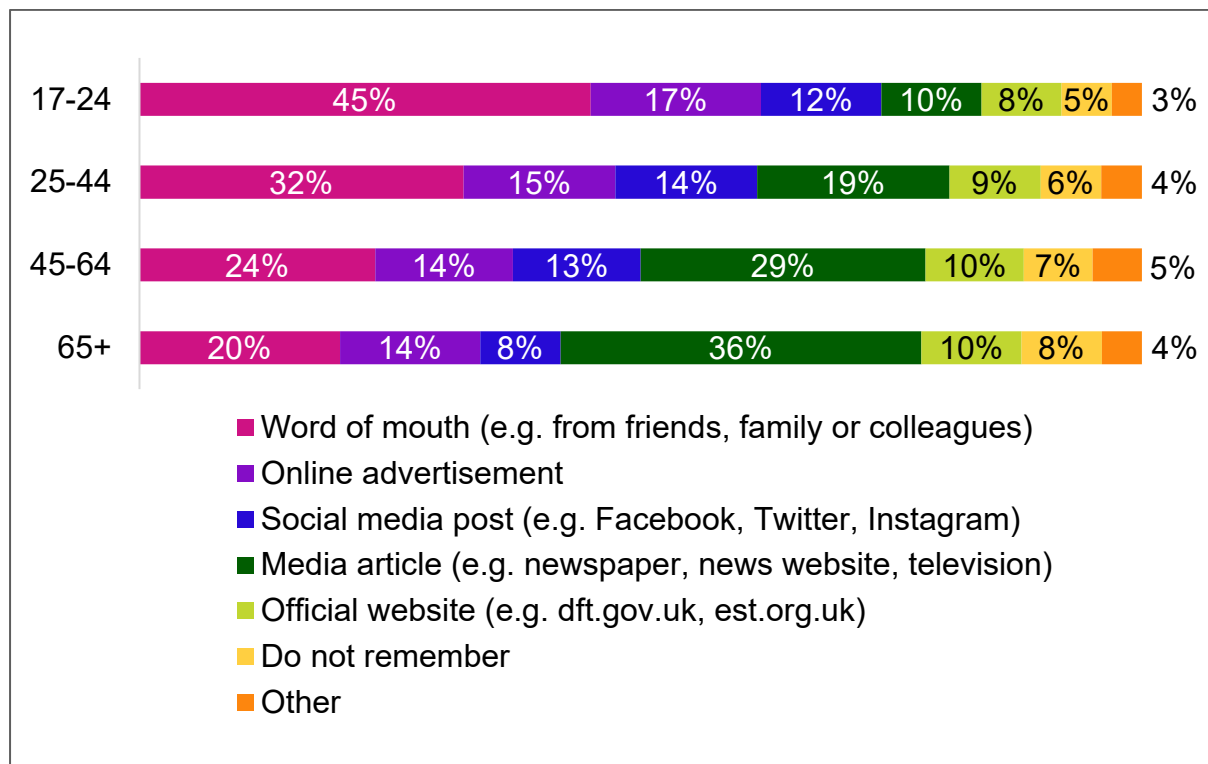
Word of mouth was the commonest means of learning about the scheme amongst voucher users who cycled regularly at the time of applying (31%), whereas the commonest means amongst voucher users who cycled occasionally at the time of applying was media articles (also 31%).

Differences in how people first heard about the scheme were also examined for gender, ethnicity, home location (rural/urban and region), employment, income, disability and age.

For age, there were strong differences in how people found out about the scheme, as shown in Figure 2. Word of mouth was cited by 45% of 17-24 year-olds, falling to 20% of those aged 65+. Whereas media articles were cited by 10% of 17-24 year-olds, rising to 36% of those aged 65+. Although those aged 65+ were less likely to mention social media (8%), the proportions mentioning this in the other age groups were relatively similar (12-14%).

<sup>9</sup> Figures calculated before rounding.

**Figure 2: How people first heard about the scheme, depending on their age**



For other socio-demographic characteristics, the differences in how people first heard about the scheme were small. All of the means identified were important, given that they were mentioned by 10% or more of survey respondents as a whole.

### 3.3. Ease of scheme application process

Following the prime-time announcement of the scheme at the daily Covid-19 press conference, the Fix Your Bike website crashed due to the volume of demand, and, once operational, vouchers were in very high demand.

In the survey, to try to assess the application process rather than the issue of oversubscription, respondents were asked “Apart from issues of voucher availability, how easy or difficult did you find the application process for obtaining a Fix Your Bike voucher?”. Results weighted to represent all applicants were:

- 46% – Very easy
- 24% – Somewhat easy
- 15% – Neither easy or difficult
- 9% – Somewhat difficult
- 4% – Very difficult
- 2% – Can’t remember

Overall, 71% of applicants reported finding the process easy<sup>10</sup>, while only 13% found it difficult. Voucher users were more likely than non-users to find the process easy (82% compared to 60%). Voucher non-users were three times more likely than users to find the process difficult (18% compared to 6%).

This suggests that difficulties at the voucher application stage may have been a reason that some people did not go on to use a voucher. For example, some people may have completed the registration survey but not got as far as claiming a voucher, as per the customer diagram in Appendix A. However, although the question focused on the application process, some people may have interpreted the question in the broader administrative sense of getting a voucher *and* arranging the repair. Evidence from the qualitative interviews was that most non-users found the process of applying easy but the difficulties then arose with booking in a cycle or agreeing a price. These issues of scheme process are discussed in Chapter 7.

The biggest issue mentioned in the qualitative interviews was how oversubscribed the scheme was, with people missing out on getting a voucher and having to wait to re-apply in the next wave. It took some people two or more rounds to get a voucher.

*“I applied the first time around but didn’t get it...So the second time around I waited up until silly o’clock, for the vouchers to go online, then I could apply straightaway.”*

*[Voucher User Interviewee]*

Prior notification, as well as releasing vouchers over a series of timeslots outside normal working hours, might have been beneficial for people who do not work at a computer, such as delivery drivers and those in factories, retail, or healthcare.

### 3.4. Summary

Word of mouth and media articles were the most common ways of learning about the scheme, though online advertisements, social media posts and official websites were each also mentioned by more than 10% of people.

The qualitative research highlighted the importance of promotion by cycle retailers (and others in the cycling community); the announcement of the scheme during a Government Covid-19 briefing; and promotion by money-saving websites.

Differences in how different socio-demographic groups heard about the scheme were mostly small, although different age groups heard about the scheme in different ways: word of mouth was more important for younger people and media articles were more important for older people.

Over 70% of people had found the voucher application process easy or very easy. The proportion of those who reported finding the process more difficult was higher amongst those who did not go on to use a voucher. However, the qualitative interviews suggest issues such as booking in a cycle or agreeing a price (discussed in Chapter 7) were more problematic for voucher non-users than the initial application process.

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<sup>10</sup> Figure calculated before rounding.

## 4. Who applied for a voucher?

### 4.1. Introduction

The Fix Your Bike scheme was open to anyone who lived in England. This chapter looks at the characteristics of voucher applicants compared to:

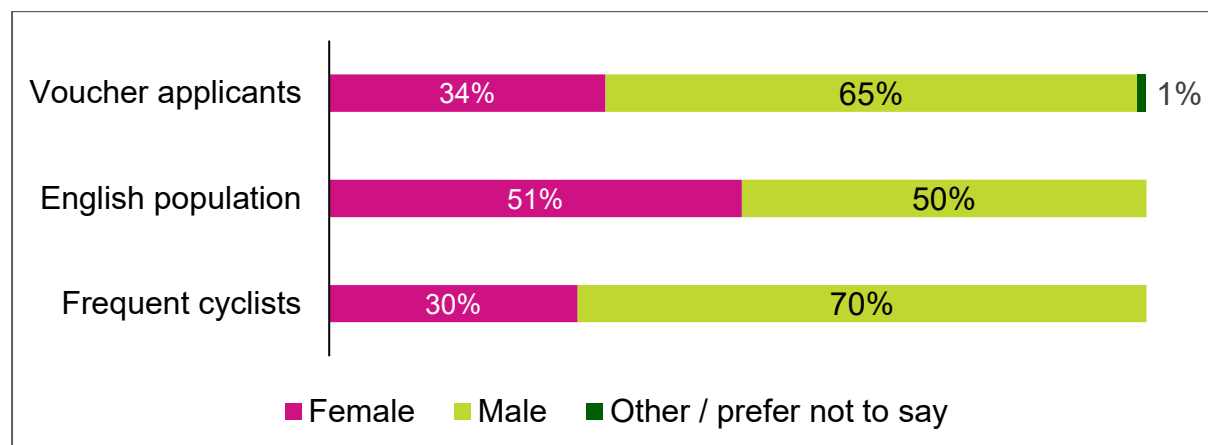
- The population of England as a whole.<sup>11</sup>
- ‘Frequent’ cyclists – cycling three or more times a week.<sup>12</sup>

### 4.2. Gender, age and home location

Data about gender, age and home location were available for all applicants.

Only a third (34%) of voucher applicants were female. This reflects the pattern that women cycle less than men (see Figure 3).

**Figure 3: Gender of voucher applicants, compared to the English population and frequent cyclists**

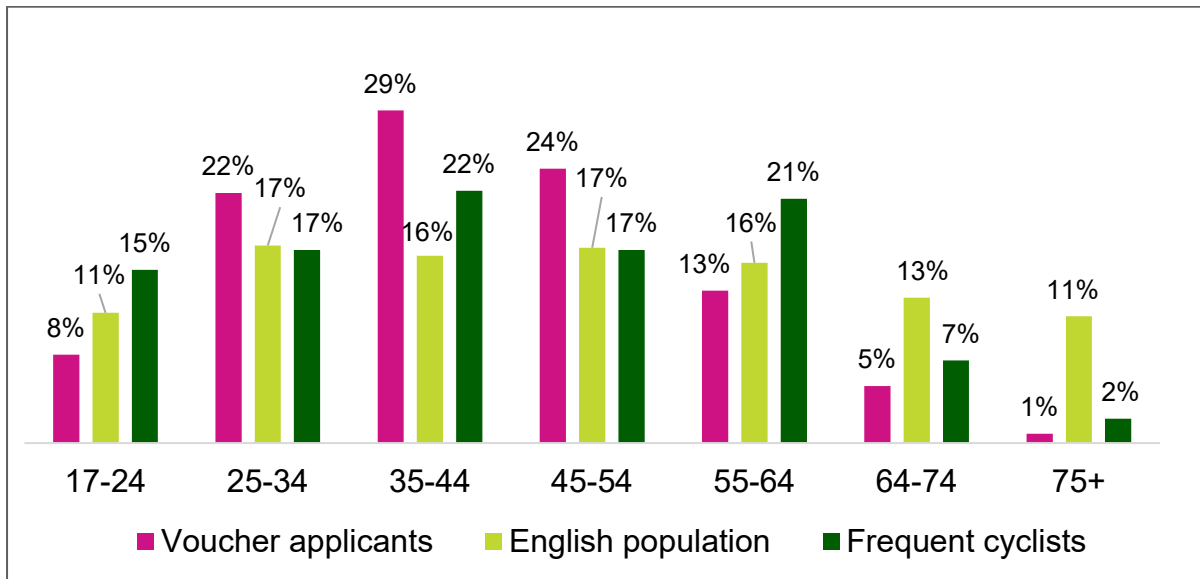


Adults of all age groups applied for Fix Your Bike vouchers. However, people aged 25-54 were over-represented: they made up 74% of voucher applicants compared to 50% of the population (see Figure 4).

<sup>11</sup> **Age, gender, rural-urban and regional** data are from 2020 Mid-Year Population estimates; age breakdown is for those aged 17 and over. Rural-urban data are from Statistical Digest of Rural England. **Ethnicity, disability and employment** data are from 2021 Census; employment data is for those aged 16+ and includes full-time students in employment. **Income** data are from Family Resources Survey: financial year 2020 to 2021; income bands used for the comparison comprise total gross household income of £400 a week or less and £1,000 a week or more. **Household car ownership** data are from 2021 National Travel Survey, NTS0703.

<sup>12</sup> Data from the 2020 National Travel Survey (but with ethnicity data for 2018 and 2019 combined, supplied by DfT). Data for those aged 17 and over.

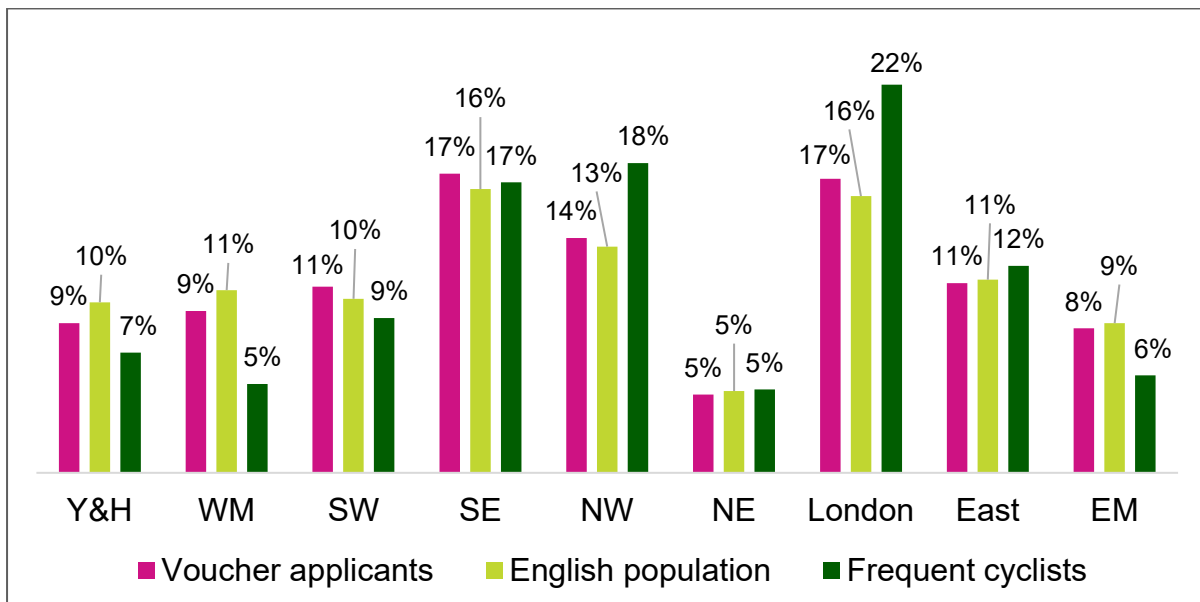
**Figure 4: Age of voucher applicants, compared to the English population and frequent cyclists**



About 83% of voucher applicants were from **urban areas**; this is similar to the proportion of the English population that lives in urban areas.

Voucher applicants were from all **regions** of England, and applications reflected the proportion of the population in each region (with differences, before rounding, being 1 percentage point or less). This is despite the greater prevalence of cycling in some regions, in particular London and the North West (see Figure 5).

**Figure 5: Regional location of voucher applicants, compared to the English population and frequent cyclists**



Key to English Regions: Y&H = Yorkshire and the Humber; WM = West Midlands; SW = South West; SE = South East; NW = North West; NE = North East; London = Greater London; East = East of England; EM = East Midlands.



People living in more deprived areas, as identified by the 2019 Index of Multiple Deprivation, were less likely to register for the scheme. Only 14% of voucher applicants were from the 20% of most-deprived areas, whereas 24% of voucher applicants were from the 20% of least-deprived areas.

### 4.3. Ethnicity, disability, employment, income and car ownership

The follow-up survey asked about some additional personal characteristics.<sup>13,14</sup> Results indicate that:

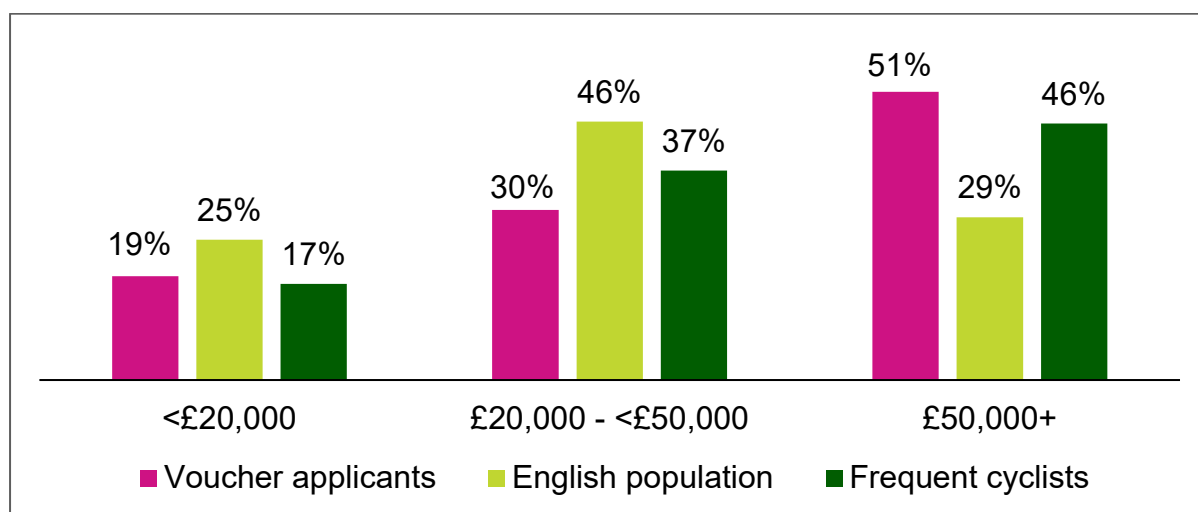
- **Ethnicity:** People from white ethnic groups were more likely to apply for a voucher than those from other ethnic groups (90% of voucher applicants were white, compared to 81% of the English population). This may reflect the greater prevalence of cycling amongst white ethnic groups: for example, 92% of frequent cyclists are from white ethnic groups.
- **Disability:** 16% of voucher applicants reported that they have a disability that limits their activities, compared to 17% of the English population.
- **Employment:** Those in employment were more likely to apply for the scheme than those who were not: 75% of voucher applicants were in employment compared to 57% of residents in England aged 16+.
- **Car ownership:** Car owners were more likely to apply for the scheme: 90% of voucher applicants reported that their household had access to at least one car (compared to 78% of English households); and 51% of voucher applicants had two or more cars available (compared to 33% of English households).
- **Income:** Higher income households were more likely to apply: 51% of voucher applicants were from households with an estimated annual income of £50,000 or more (while only 29% of UK households are in this income range). This may reflect the greater prevalence of cycling amongst higher income groups: for example, 46% of frequent cyclists are from households with an estimated annual income of £50,000 or more (see Figure 6).

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<sup>13</sup> Respondents answering 'prefer not to say', or, in the case of disability, not completing both questions, were excluded before calculating percentages.

<sup>14</sup> These were respondent characteristics at the time of answering the survey (Autumn 2021) rather than at the time they applied for the scheme. In this section, data for 'voucher applicants' is inferred by using weighted data from survey respondents.

**Figure 6: Household income of voucher applicants, compared to the English population and frequent cyclists**



#### 4.4. Cycling frequency and cycle condition

Voucher applicants were asked how often they cycled, and about the condition of their cycle.

- **Cycling frequency:** 35% of voucher applicants recalled that, a year prior to registering for a voucher, they had been cycling less than once a week, including 6% who said that, at that time, they never cycled.
- **Cycle condition at the time of registering:** 16% of voucher applicants described their cycle as ‘broken, damaged or unrideable’; 63% classed their cycle as ‘functional but with mechanical issues’; and 21% described it as ‘functioning well but needs checking for general maintenance’.

#### 4.5. Insights from participating businesses on the characteristics of voucher users

Although the businesses interviewed did not identify major socio-demographic differences between voucher users and their usual customers, some businesses reported that they initially saw more women and families compared to their usual customers. Most also noted that voucher users included more occasional cyclists, or people who were returning to cycling, or who wanted to ride cycles that had been unused for some time, or who wanted to ensure recently purchased second-hand cycles were roadworthy.

*“As it all happened during lockdown, it was people getting back into cycling, saying ‘I can’t get out in my car... I need my exercise... I’ve got so much time on my hands....I want to get out cycling... Can you do my bike up?’ And, of course, the Fix Your Bike scheme obviously helped with that. It was a nudge, an incentive, to push people in my direction.”*

*[Business Interviewee]*

Businesses considered that other voucher users included commuters and people who cycle as their main form of transport. Businesses commented that many people in the latter group cannot afford servicing and repairs, and may ride their cycle 'into the ground', and so the Fix Your Bike scheme was especially beneficial for them.

One business estimated:

*"About 20% of voucher [users] were getting a bike out of the shed to start cycling more often, usually for leisure, or to start cycling again for the first time in years. Of the rest, about half were commuters who cycle by choice... who would get their bikes serviced anyway but got the benefit of free repairs...and half were people using their bike as their only form of transportation. They don't usually get their bikes serviced as often, so they benefitted even more."*

*[Business Interviewee]*

Another observed:

*"About a third of the people who brought vouchers into us probably wouldn't have had their bike serviced otherwise, and would have just kept riding their bike until it became unrideable, and, for a number of these, that would have meant they were riding unsafe bikes."*

*[Business Interviewee]*

One interviewee argued that future schemes should be selective in terms of who receives financial support:

*"The people who came in with high end road bikes, or who are regular cyclists, aren't who it was aimed at, I don't think. Maybe there could be a way to vet people in future, so the vouchers are really used for getting bikes that haven't been regularly used back out there and getting more people into cycling."*

*[Business Interviewee]*

## 4.6. Summary

The scheme attracted people from all parts of England, and achieved a representative geographical coverage across regions, and between urban and rural areas. People from deprived areas were slightly less likely to apply.

Only a third of voucher applicants (34%) were female, reflecting the pattern that women cycle less than men. People aged 25-54 were over-represented amongst voucher applicants, both in comparison to the English population as a whole and in comparison to the age profile of frequent cyclists. White people, those in employment, car owners, and those on higher incomes were also over-represented, compared to the English population.

Over a third (36%) said that they had not been regular cyclists 12 months prior to applying for a voucher. Almost eight out of 10 (79%) had cycles that had mechanical issues or were unusable. The businesses interviewed reported that many voucher users were not regular cyclists and were bringing in cycles not in regular use.

## 5. Who used a voucher?

### 5.1. Socio-demographic differences in who used a voucher

Just under half (46%) of all voucher applicants went on to use a voucher.

Data about gender and home location, available for all applicants, shows that there was little difference in voucher usage rates between men and women; between geographical regions; or between urban and rural areas.

There were larger differences in voucher usage rates for two characteristics:

- **Age:** use rates were higher among older groups, ranging from 38% for 17-24 year-olds, to 59% for those aged 65+.
- **Deprivation:** usage rates were lower for those in more deprived areas, ranging from 36% for people living in the most-deprived decile to 51% for those living in the least-deprived decile.

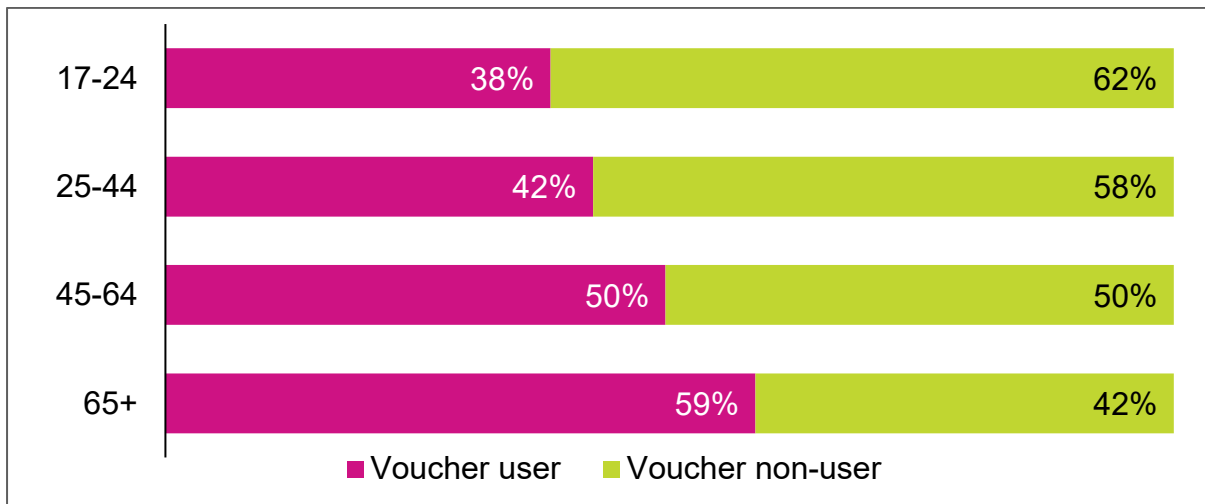
These differences are shown in Figure 7 and Figure 8.

Differences in voucher redemption rates in relation to ethnicity, disability, employment status and income cannot be directly calculated, because the absolute numbers of each group that applied is not known. However, data from the follow-up survey can be used to compare the proportions of respondents that used vouchers, according to these characteristics.<sup>15</sup> These data suggest that ethnicity, disability, employment status and income may have had small effects on voucher redemption rates.

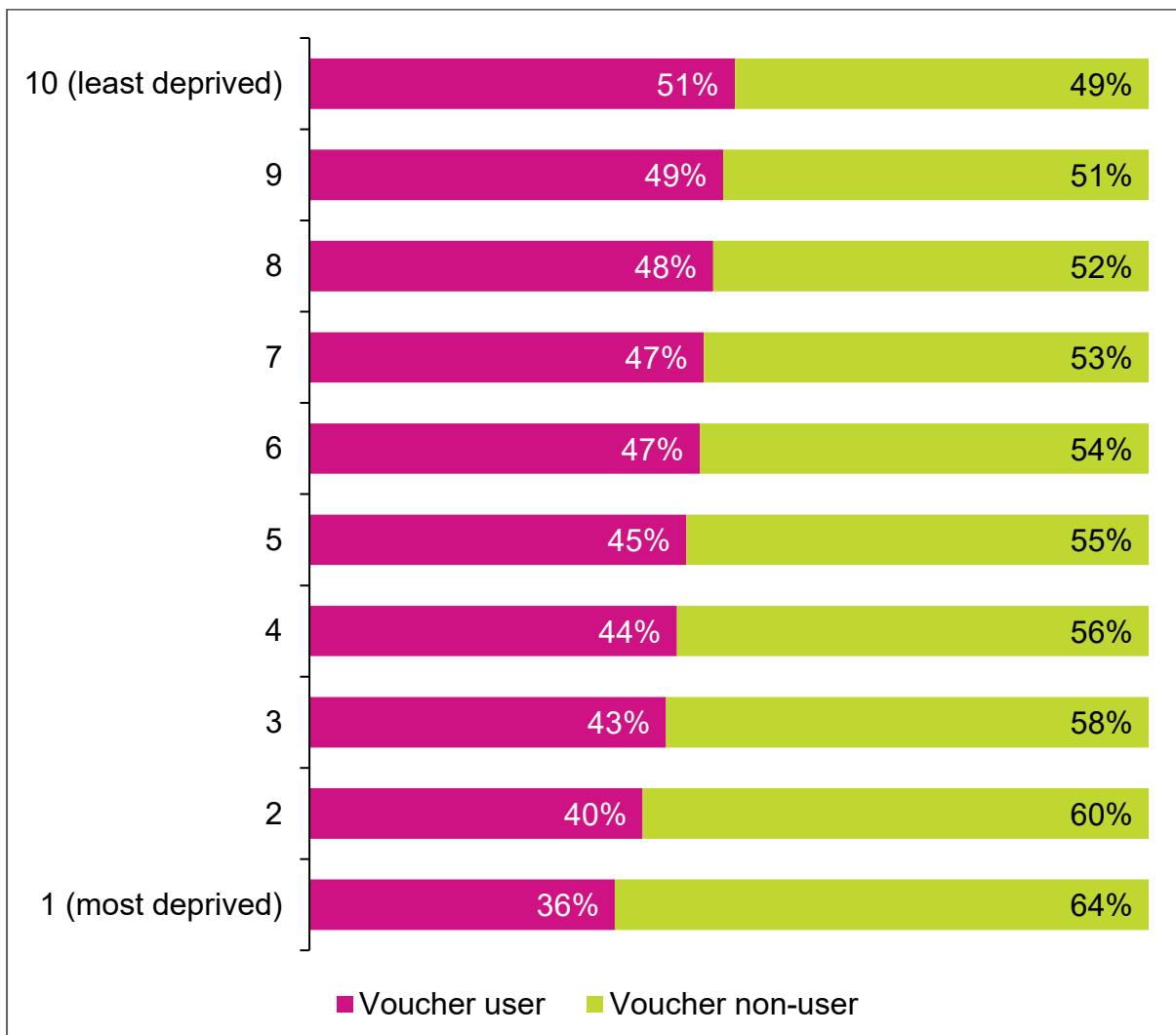
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<sup>15</sup> **Of those responding to the survey**, 84% had used their voucher. This is higher than the proportion of **voucher applicants** that used their voucher because of survey response bias (i.e. those who did not redeem their voucher were also less likely to respond to the survey). However, the proportion of survey respondents who used their voucher shows only small variations by ethnicity, disability, employment status and income. The proportion was 83% for other-than-white ethnic groups compared to 85% for white ethnic groups; 81% for disabled people compared to 85% for those who were not disabled; 84% for those in employment compared to 85% for those not in employment; and 81% for those with an annual household income of less than £20,000 compared to 85% for those with an income of £50,000 or more. Variations in redemption rates by age and deprivation were similar to the evidence from registration data, though less marked: 83% for survey respondents aged 17-24 compared to 85% for those aged 65+; and 79% for those in the most deprived decile compared to 85% for those in the least deprived decile.

**Figure 7: Proportion of voucher applicants who used a voucher, by age**



**Figure 8: Proportion of voucher applicants who used a voucher, by level of deprivation of area of residence**





## 5.2. Effect of cycle condition and cycling behaviour on voucher use

Registration data for all applicants showed cycle condition and cycling behaviour had a small effect on voucher usage rates:

- 47% of voucher applicants who classified their cycle as 'functional but with mechanical issues' used their voucher, compared to 43% of voucher applicants who classified their cycle as 'functioning well but needing general maintenance' and 43% of voucher applicants who stated that their cycle was 'broken, damaged or unrideable'.
- 49% of voucher applicants who said they mainly wanted to use their cycle for 'general use' such as 'shopping, visiting friends or family or reaching appointments' went on to use their voucher, compared to 46% who said they mainly wanted to use it for 'exercise or recreation' and 44% who said that they mainly wanted to use it for 'work or education'.
- Voucher usage rates were highest for occasional cyclists. 48% of those who reported that, the year before applying for a voucher, they cycled less than once a week then went on to use their voucher; compared to 46% of those who never cycled, 45% of those who cycled at least once a week and 44% of those who cycled at least two days a week or more.

Although differences between the sub-groups are small, the findings suggest that voucher use was partly related to need. Those whose cycle was functioning well, or who were already cycling two or more days a week 12 months before applying, were less likely to use a voucher – perhaps implying that some people obtained a voucher as an 'insurance policy'.

Conversely, those who reported that their cycle was 'broken, damaged or unrideable', also reported lower levels of voucher use. This may be because a voucher would not have enabled the cycle to be sufficiently repaired to use (for example, because the cycle was beyond repair or because the additional cost was off-putting).

## 5.3. Summary

Just under half (46%) of voucher applicants went on to use a voucher. Voucher usage rates were higher for older age groups (with 59% of applicants aged 65 or over using their voucher) and people living in least-deprived areas (with 51% of applicants living in the least-deprived areas using their voucher).

The likelihood that a person used a voucher was also higher for people who were not cycling regularly at the time of applying, who wanted to use their cycle for 'general use' and who had a cycle that was functional but with some mechanical issues. It was lower for regular cyclists with a cycle that was functioning well, and also for people whose cycle was broken, damaged or unrideable.

## 6. Fix Your Bike and wider uptake of repair/servicing

### 6.1. History of paying for servicing/repair

Survey respondents were asked whether they had ever paid to have a cycle serviced or repaired, before applying for a Fix Your Bike voucher. Over 60% of all respondents said they had paid for servicing/repair in the past, including 63% of voucher users and 61% of voucher non-users.

There was a pronounced difference between regular and occasional cyclists:<sup>16</sup>

- 75% of voucher users who reported cycling regularly said they had paid for a repair/service in the past compared with 48% of voucher users who cycled occasionally.
- Amongst voucher non-users, there was a similar, though slightly narrower, gap between regular (71%) and occasional cyclists (47%).

Thus, cycling frequency was a strong predictor of whether people had previously had work done on their cycle. Nearly half of those who reported that they cycled less than once a week at the time of applying for a voucher had not paid for cycle repair or servicing before.

Whether or not people had previously paid for repairs was then examined for different sub-groups. There were some differences, as follows:

- **Gender:** Female respondents (57%) were less likely to report having paid to have a cycle repaired/service than males (66%).
- **Age:** There was an inverted U-shape to responses by age, with 17-24 year-olds (58%) and respondents of 65 or more (57%) less likely to have paid for work than 25-44 year-olds (62%) or 45-64 year-olds (65%).
- **Income and employment status:** Those on higher incomes or in employment were more likely to have previously paid for servicing/repair, with the proportion increasing from 59% (households with an income less than £20,000) to 66% (£50,000 or more), and from 59% (not in employment) to 64% (in employment).
- **Car/van availability:** 72% of those without access to a car/van reported having paid previously for cycle servicing/repair, compared with 62% of those with a car/van.

These differences were partly related to how often people were cycling. Women, older people, those not in employment and car owners were all less likely to be regular cyclists at the time of applying. The two exceptions were younger people and those on lower incomes. These groups may be less able to afford to pay for cycle repairs, and more likely to rely on their own expertise, or that of friends and family.

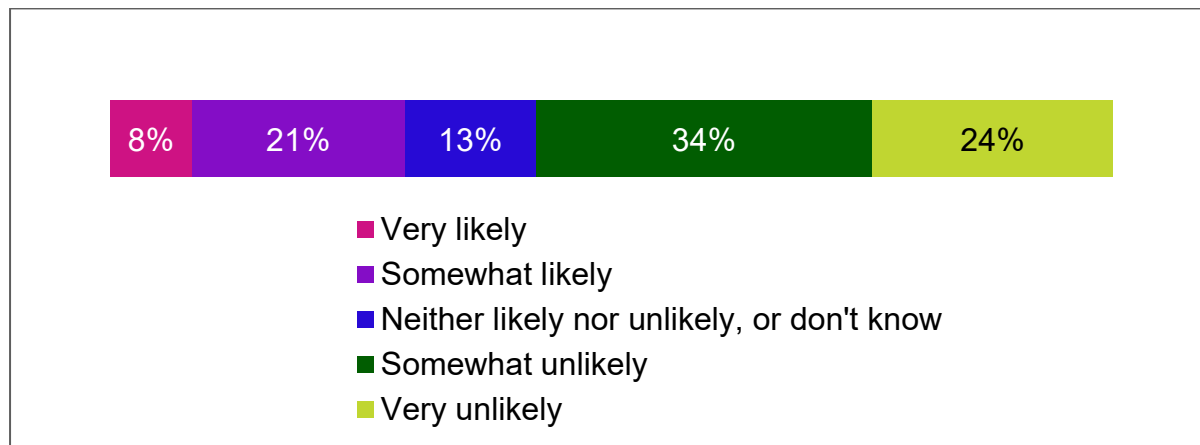
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<sup>16</sup> Based on reported cycling frequency at the time of applying for a voucher.

## 6.2. Voucher users and likelihood of undertaking work anyway

Voucher users were asked how likely they were to have got the repair or service work done on their cycle anyway, without a voucher. Results are shown in Figure 9.

**Figure 9: Whether voucher users were likely to get the work done anyway, without a voucher**



A majority (58%) said they would have been unlikely to, with two-fifths of this group describing this as 'very unlikely'. Less than a third (29%) reported that they were likely to have done so. This suggests the scheme mainly paid for service/repair work that would not otherwise have gone ahead. This is borne out in the qualitative interviews:

*"I hadn't used the bike in over a year. So it was in a pretty bad stage of disrepair. I think one of the gear cables had snapped, the chain was a little rusty, there was a puncture in one of the tyres. It was pretty bad. I doubt I'd have found the time or money to sort it out without the voucher."*

*[Voucher User Interviewee]*

*"I got my bike free on one of those trading swap sites. So I wouldn't have put an £80 service into it. But because of the voucher, it came down to about £30."*

*[Voucher User Interviewee]*

For those people who would have had the work done anyway, the interviews suggest that the voucher incentivised them to get it done sooner.

*"I'd have paid without the scheme but I probably would have procrastinated longer, but this made me sort it out."*

*[Voucher User Interviewee]*

*"I would probably have got the bike service at some point anyway but it certainly pushed me along in that direction. I thought it was one of the best Government schemes I'd heard of."*

*[Voucher User Interviewee]*

### 6.3. Voucher non-users and work undertaken

Those who had not used a voucher were asked whether, since applying, they had got work done to their cycle without using a voucher. A majority (70%) said they had not, with 30% saying that they had.

Voucher non-users who paid for work themselves were more likely to be regular cyclists, male, less than 65 years old, higher income earners, and without access to a car/van. Specifically:

- **Cycling frequency:** Voucher non-users who cycled regularly were more likely to have had work done (41%) than those who cycled occasionally (16%).
- **Gender:** Male voucher non-users were more likely to have had work done (34%) than female voucher non-users (24%).
- **Age:** The oldest age group (65+) were less likely to have had work done than other age groups (25% compared with a mean of 31% across remaining groups).
- **Income:** Voucher non-users with lower incomes were less likely to have had work done than those with higher incomes (25% for those with household income less than £20,000, rising to 35% for those with incomes of £50,000 or more). Non-disabled and employed voucher non-users were also more likely to have had work done.
- **Car access:** Voucher non-users without access to a car/van were more likely to have had work done (37%) than those with access to a car/van (30%).

The differences across most socio-demographic attributes are again likely to be partly related to how often people were cycling.

78% of those who paid for repairs or servicing without using a voucher had also done so in the past.

In qualitative interviews, most of the voucher non-users who had not had their cycle repaired still intended to get the work done. Three female voucher non-users intended to take their cycles to a professional mechanic. Three male interviewees planned to carry out minor repairs themselves. One stated that he may seek professional help for more advanced repairs, while two planned to do small repairs themselves until it became more cost-effective to replace their cycles.

*“I’ll keep it ticking over for as long as I can. But it’s getting on for 10-15 years old now, so isn’t worth the £250 they quoted me for repairs. Anything more than tyres needing new inner tubes and I’ll probably just get rid of it, to be honest. For anything minor, you can go on YouTube and have a crack at doing it yourself.”*

*[Voucher Non-User Interviewee]*

## 6.4. Summary

Over 60% of survey respondents reported having paid for cycle repair/service in the past, while over a third had not done so. Proportions were similar for voucher users and voucher non-users. Regular cyclists were more likely to have paid for repairs in the past than occasional cyclists.

Only 29% of voucher users reported that they would have been likely to get the work done anyway, without a voucher. Only 30% of voucher non-users had paid to have any work done on their cycle since applying for a voucher.<sup>17</sup> In combination, these findings suggest that most of the work that the vouchers funded was additional to what would have occurred anyway.

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<sup>17</sup> This is perhaps surprising, given that 61% had paid for work in the past.

## 7. Satisfaction with the scheme and reasons for not using the vouchers

### 7.1. Satisfaction with the scheme

Voucher users were positive about the scheme as a whole:

- 82% found the process of using a voucher (once they had obtained it) somewhat or very easy, while 9% found it somewhat or very difficult.
- 83% considered that they had been charged a fair price, while 8% felt they had not been charged a fair price.<sup>18</sup> The proportion considering they had been charged a fair price was higher (91%) amongst those who had a prior sense of what the repair or service should cost before speaking to the cycle shop.
- 84% were somewhat or very satisfied with the experience of using the cycle shop, while 12% were somewhat or very dissatisfied.
- 98% said that if a similar scheme was run in future, they would be somewhat or very likely to recommend it to a friend or colleague.

In comments left in the pilot and pre-launch versions of the survey<sup>19</sup>, people commonly wrote variations of ‘thank you’ and ‘great scheme’. Some respondents stated that they felt the scheme was a good use of Government money, or that they felt it was consistent with health and climate goals. For example:

*“The scheme gave me the motivation to get the bike fixed, which in turn led me to using it now a number of times per week. Cycling has become a habit and it has improved my fitness and mental health, so I’m very grateful, as without the scheme I wouldn’t be the person I now am.”*

*[Survey Respondent, Voucher User]*

*“I think it was one of the best ideas the Government had during the pandemic. It should encourage everyone into cycling and other activities, and, hopefully, as a pensioner in my seventies, keeps us fitter to fight off illness.”*

*[Survey Respondent, Voucher User]*

*“Without the scheme I would have not got my broken bike fixed and it’s made a big difference to my health and cut my carbon footprint.”*

*[Survey Respondent, Voucher User]*

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<sup>18</sup> There were two related questions: “Before speaking to the bike shop, did you have a clear sense of how much the repair or service should cost?” and “Do you think you were charged a fair price for the work done?” For the purposes of analysis, the answers have been combined. Only 50% of respondents said that they had a clear sense of what the repair or service should cost.

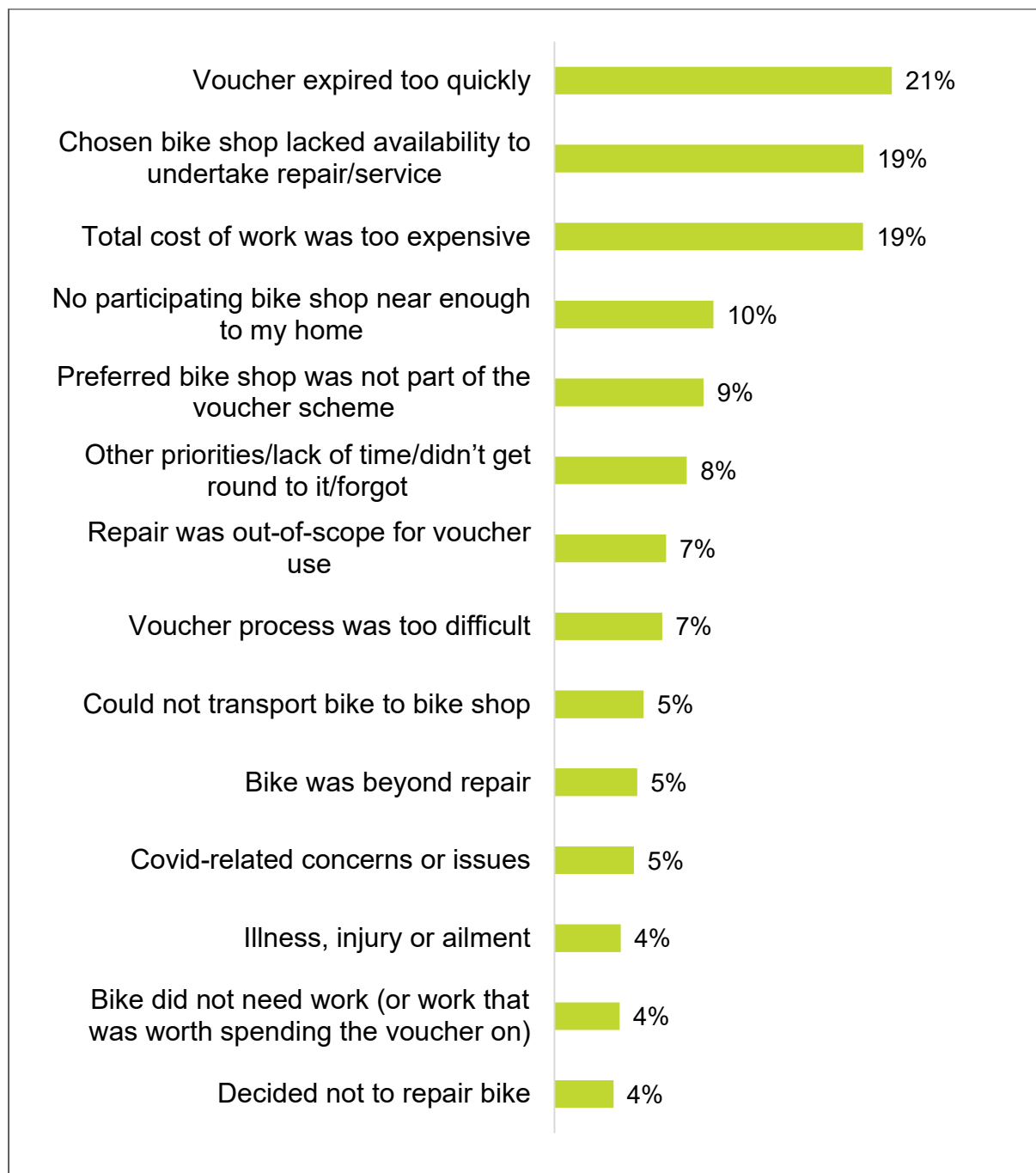
<sup>19</sup> The main survey did not allow people to leave general comments.

## 7.2. Reasons for not using a voucher

Respondents who had not used a voucher were asked why not. Multiple options could be selected, though 65% selected only one. Results are shown in Figure 10. The main reasons chosen were:

- 'Voucher expired too quickly' – 21%
- 'Chosen bike shop lacked availability to undertake repair/service' – 19%
- 'Total cost of work was too expensive' – 19%

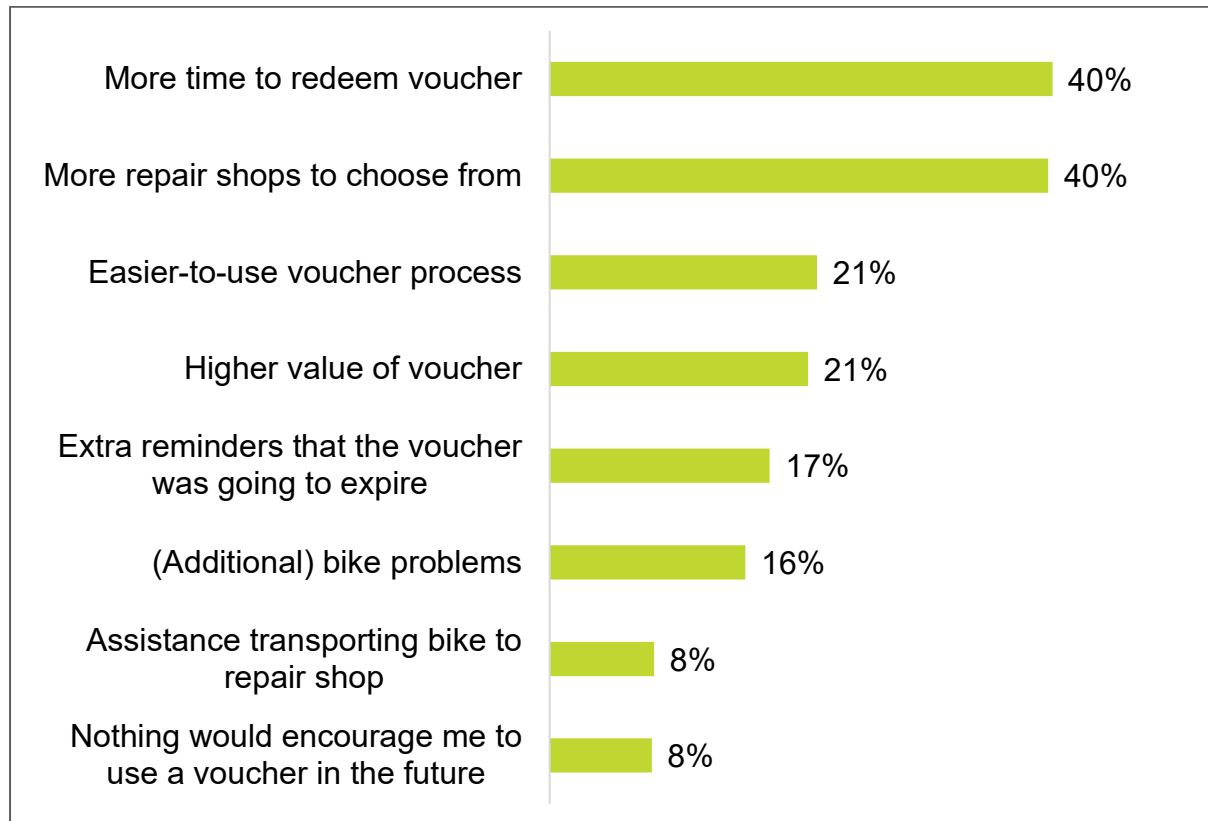
**Figure 10: Reasons given for not using a voucher (multiple choices possible)**





Respondents who had not used a voucher were also asked what would encourage them to use one in future. Respondents were again free to choose multiple options, though 60% selected only one. Results are shown in Figure 11. The main responses, both selected by about 40% of respondents, were ‘more time to redeem voucher’ and ‘more repair shops to choose from’.

**Figure 11: What would make non-users more likely to use a voucher in future (multiple choices possible)**



Qualitative interviews revealed various barriers to using a voucher. These included the issues of repairer availability and cost, and also numerous uncertainties. Some non-users were unsure about what a voucher covered; whether shops they were unfamiliar with would provide cost-effective repairs; whether they would understand jargon in specialist shops; whether they would be left with a larger than expected repair bill that they would be unable to pay; and whether they would use the cycle enough to justify paying any costs above the £50 voucher.

For one voucher non-user who was a student, the cycle shop was too busy to book in his repair until after the academic year ended, when he was returning to his family home. By the time he returned to university, the voucher had expired:

*“The thought of going to an independent repairer was quite daunting. I didn’t know if that would make it more expensive, then I’d have to pay more. I wouldn’t be confident talking about what was wrong with my bike, so part of it was I didn’t want to be ripped off; and there weren’t really any [other shops] near me. I felt safer using the [chain retailer] place where I’d had stuff done before.”*

*[Voucher Non-User Interviewee]*

One voucher non-user reported that he cycled for over an hour to take his cycle for an initial assessment at a chain retailer's nearest store. After leaving it there and returning home by train, he was told they didn't have capacity to carry out a service.

*"I felt really let down and didn't use the second voucher I had for my daughter's bike either. I couldn't go elsewhere, as the nearest local bike shop closed down. But at least it was reassuring the safety check hadn't picked up on anything major."*

*[Voucher Non-User Interviewee]*

Difficulties with transporting a cycle to a shop (mentioned by 5% of voucher non-users) point to a potential role for cycle mechanics who carry out repairs at a customer's home, or businesses that can collect and deliver cycles.

Making it clearer that customers could decouple a voucher from a particular shop between validation and redemption – so customers could take their cycle to an alternative repairer if the first one did not have parts or capacity, or if the customer was otherwise unhappy – would also have been helpful.<sup>20</sup> One voucher non-user felt the cycle shop she had opted for was trying to charge her too much, so declined to have the work done and was keen to use an alternative option:

*"I might still get the bike serviced but I'll probably steer away from the main retailers. I might use one of the bike repair schemes happening in my city. I took one of our bikes to one, being run by a local charity as a one-off.... You could do pop ups, or involve charities, or run workshops in the summer. So it's helping charities and not-for-profits, not businesses making money. Then you'd definitely get a fair assessment of what you need doing."*

*[Voucher Non-User Interviewee]*

In some cases, store protocols may have been an issue in relation to costs. Some chain stores initially carried out a safety check, to identify all repairs required to make a cycle safe. This could lead to a cost substantially in excess of £50:

*"...they did a 10 minute 'health check', and said it'd be £125 to do the work. To me, it felt really inflated for minor repairs. So I asked them if there was anything they could do for £50 so I didn't have to pay £75 excess. They said no, as it was a kind of total service. And I don't think that's right for a bike. I pay less for my car!"*

*[Voucher Non-User Interviewee]*

Other interviews suggested that some smaller businesses were willing to complete a partial repair. For example, if the customer signed a waiver.

For some voucher non-users, and also for some businesses, there was uncertainty about whether a voucher could be used for servicing. The EST guidance for businesses explicitly stated that a voucher could be used for servicing but the terms and conditions of the voucher did not specifically mention it. Although most repairers were happy to accept a voucher for servicing, with some even requiring the service as the basis for determining if there were any larger issues, there were other

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<sup>20</sup> This was possible by phoning the telephone support line, but interviews with non-users suggested that people were not always aware of this option.

businesses that would not allow people to pay for a service with a voucher. One small repair workshop said:

*“We interpreted the scheme as only covering repairs... and not covering the cost of a service. So this was a headache, with the customers not really understanding this and having to have dialogue about it. I don’t know why the scheme didn’t formally say it covered servicing. We read the small print in detail and believe we kept ourselves tethered to what the scheme allowed for but it did make it more awkward.”*

*[Business Interviewee]*

This issue led one voucher recipient to conclude:

*“I read the conditions for the voucher and it seemed to indicate I couldn’t use it for a normal service. It didn’t seem to be for people who use their bikes regularly. I didn’t want to risk getting the service and then finding out I had to pay for the whole thing.”*

*[Voucher Non-User Interviewee]*

### 7.3. Summary

The scheme was very popular amongst those who used their vouchers, with 98% saying they would recommend it. Assessments of the ease of using vouchers and of the experience with the service providers were generally very positive. A substantial majority (83%) of beneficiaries felt they were charged a fair price for the work, and this proportion was higher (91%) amongst those who had a prior sense of what it should cost.

Amongst those who did not use a voucher, the primary reasons given were running out of time, a lack of capacity at the chosen service provider, and the repair costing too much. Qualitative interviews suggested that lack of confidence in using a voucher or visiting an unknown cycle shop, together with concerns about what the vouchers covered, may also have been a factor for some people.

## 8. Impacts of the scheme on cycling behaviour

### 8.1. Comparisons of pre-existing cycling behaviour

This chapter examines whether the Fix Your Bike voucher scheme affected cycling behaviour. It compares the behaviour of voucher users with that of non-users, treating the latter group as a 'control' for what would have happened without the scheme.

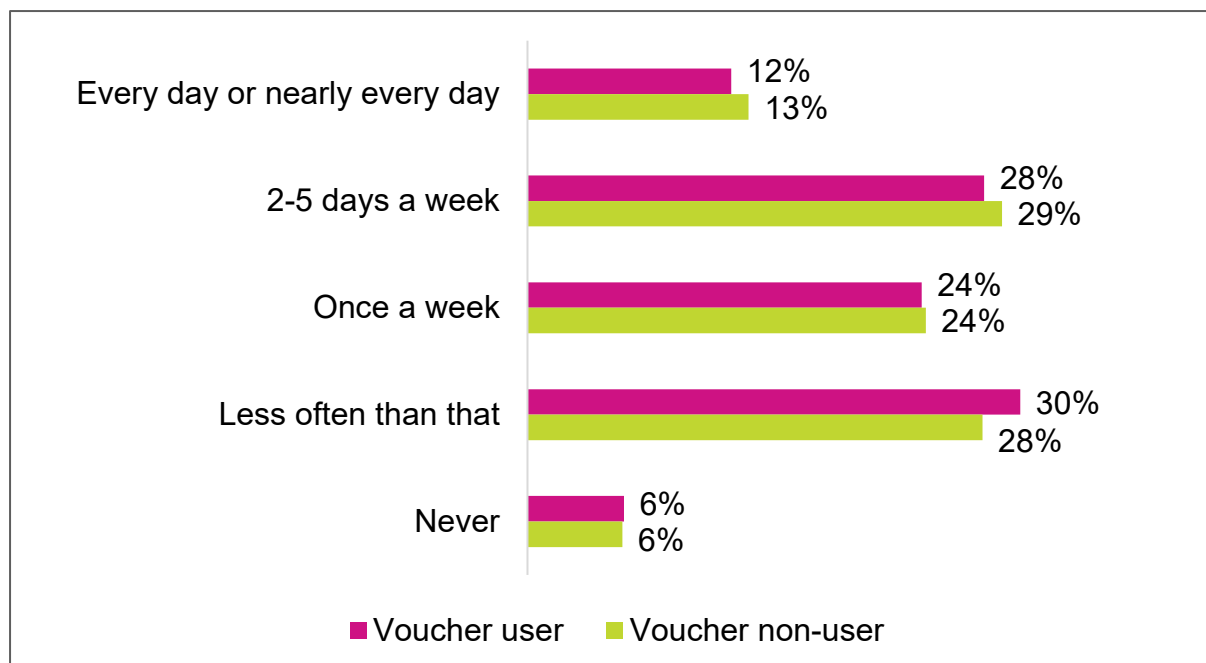
Voucher users and non-users were fairly similar in terms of cycling behaviour before, and at the time of registering for, the scheme. Figure 12 shows data from all *applicants* about cycling frequency a year prior to applying. Figure 13 shows data from all *survey respondents* about cycling frequency at the time of applying.

Both datasets show that those reporting less frequent cycling prior to, or at the time of, applying were (slightly) more likely to use a voucher, but differences were small:

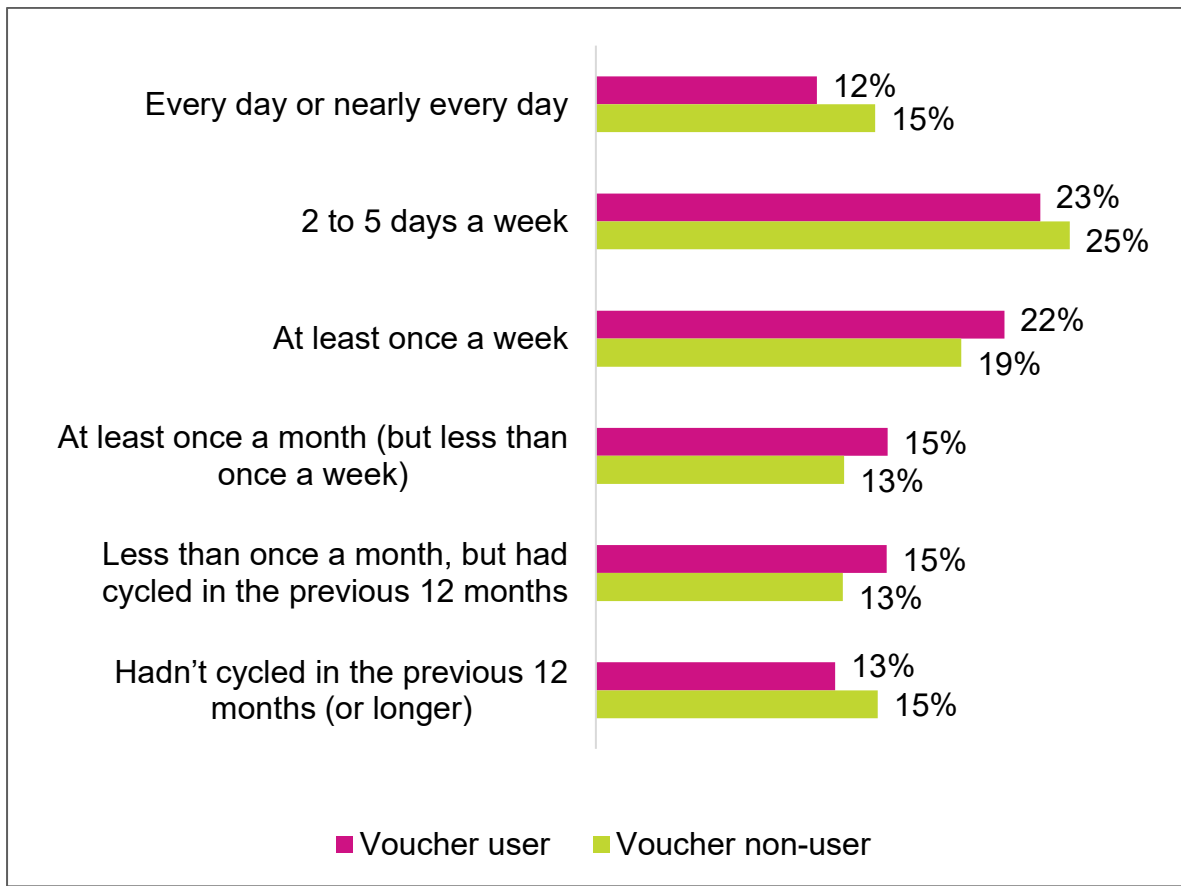
- **A year before applying**, 36% of voucher users cycled less than once a week, compared with 34% of non-users.
- **At the time of applying**, 43% of voucher users cycled less than once a week, compared with 41% of non-users.

Therefore, if the scheme had made no difference to cycling behaviour, one would expect – all other things being equal – that cycling levels at the time of the online follow-up survey would be slightly lower for voucher users than for non-users.

**Figure 12: Frequency of cycling 12 months prior to applying**



**Figure 13: Frequency of cycling at the time of applying**



Response categories in the registration survey (Figure 12) and follow-up survey (Figure 13) were different.

## 8.2. Changes in cycling behaviour

### 8.2.1 Frequency of cycling at the time of the survey

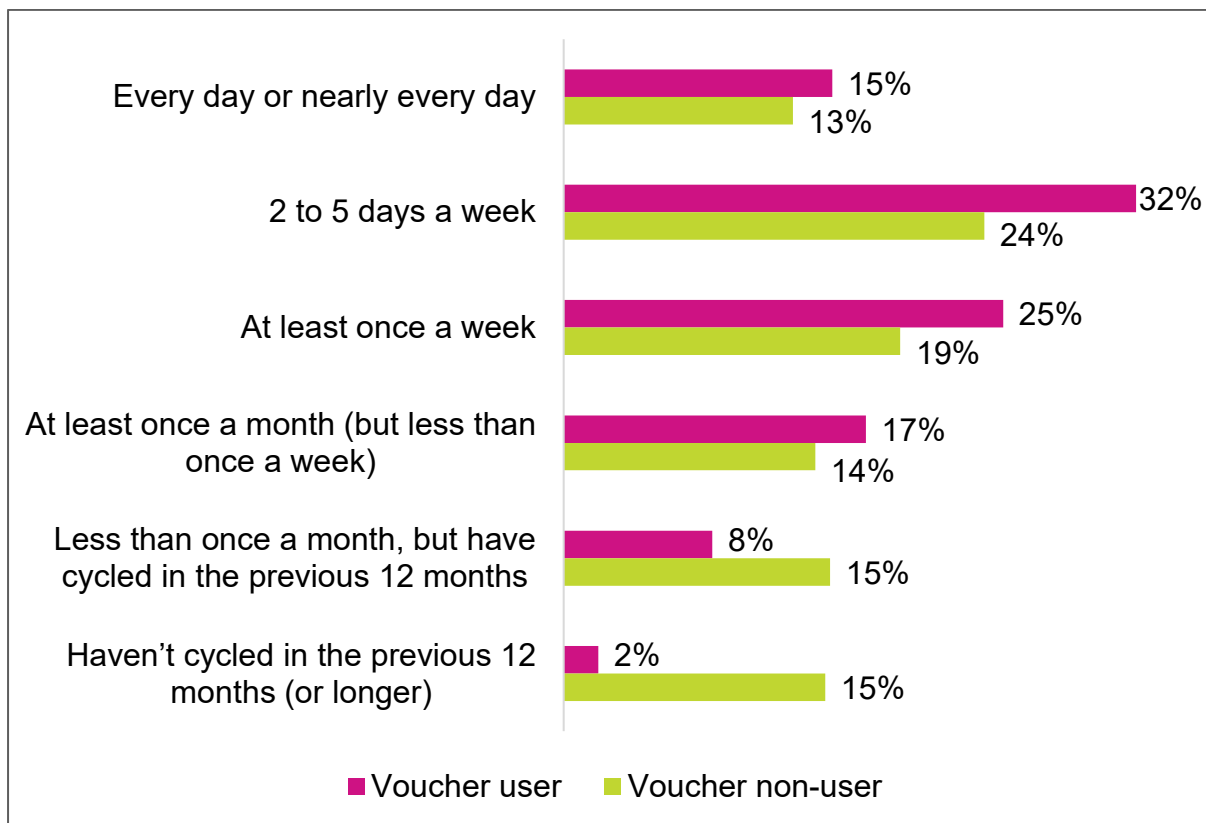
Respondents were asked “On average, how often do you currently cycle?”. The results for voucher users and non-users are shown in Figure 14.

This can be contrasted with Figure 13. It shows that the distribution between the two groups was substantially different at the time of the follow-up survey:

- 73% of voucher users were cycling at least once a week (compared with 57% at the time of applying for a voucher).
- 56% of non-users were cycling at least once a week (compared with 59% at the time of applying for a voucher).

In additional analysis of those who had been cycling less than once a week at the time of applying, nearly half of those who had used their voucher (46%) were cycling at least once a week by the time of the survey, whereas only 18% of those who had not used their voucher were doing so.

**Figure 14: Frequency of cycling at the time of the survey**



### 8.2.2 Whether cycled in the last seven days

At the time of completing the follow-up survey, 64% of voucher users reported making cycle trips in the previous seven days. For voucher non-users, 47% reported doing so.

Looking at people who were occasional cyclists at the time of applying for a voucher, 43% of voucher users reported making cycle trips in the previous seven days, but only 18% of voucher non-users reported doing so.

### 8.2.3 Whether respondents felt they were cycling more since applying

All respondents were asked “Since applying for a voucher, has there been a period of time when you have cycled more often than you did then?”.

The proportions indicating that this was the case were:

- 66% of voucher users, compared to 33% of non-users.
- 81% of occasional cyclist voucher users compared to 32% of occasional cyclist voucher non-users.

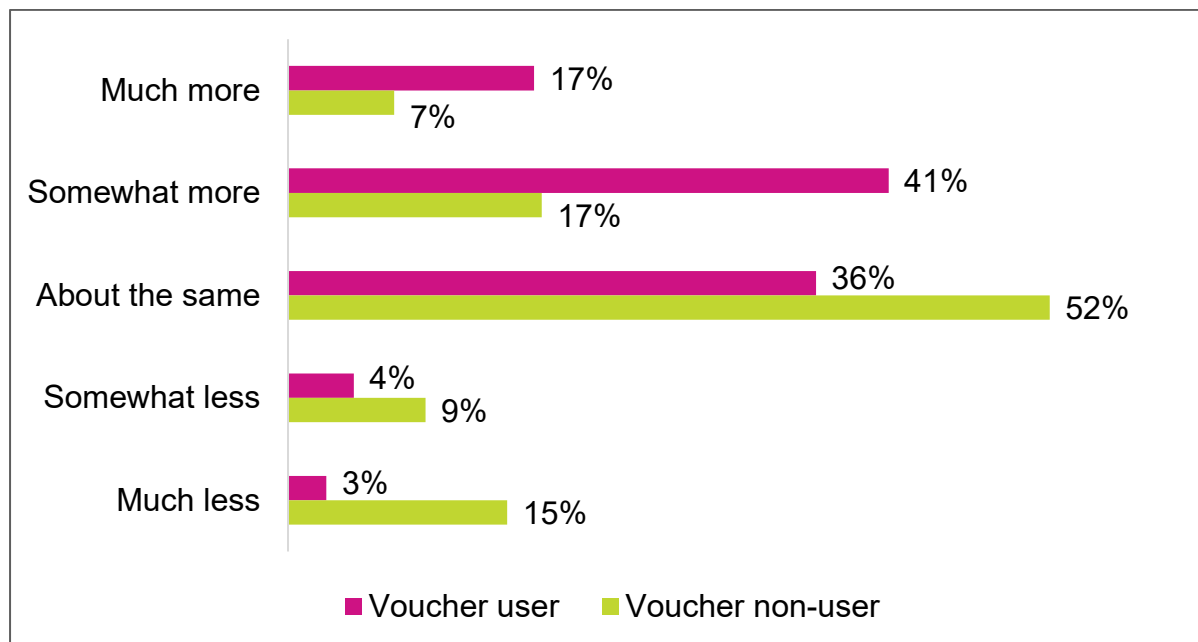
Second, all respondents were asked: “Compared to the time when you applied for a voucher, how much on average are you currently cycling? [more or less]”. Results are shown in Figure 15. This shows that:

- 57% of voucher users said they were now cycling somewhat or much more, compared to 24% of voucher non-users.<sup>21</sup>
- 7% of voucher users said they were cycling somewhat or much less, compared to 24% of voucher non-users.

Additional analysis for occasional cyclists showed:

- 72% of occasional cyclist voucher users said they were cycling somewhat or much more, compared to 26% of occasional cyclist voucher non-users.

**Figure 15: Whether cycling more or less at the time of the survey, compared to the time of applying for a voucher**



### 8.3. Quantifying changes in cycling

Those who reported that they had made cycle trips in the past seven days were asked how many trips they had made.<sup>22</sup> This information was used to estimate the number of cycling trips per week by voucher users, compared to non-users. The results are shown in Figure 16 and Table 1.<sup>23</sup> They show:

<sup>21</sup> Figures calculated before rounding.

<sup>22</sup> Respondents were advised to count each one-way journey as a trip, and to give their best estimate or to leave the question blank where that was not possible.

<sup>23</sup> To scale up the results from the subset of those cycling in the past seven days to the full sample, respondents who stated that they had not made any cycle trips in the previous seven days were coded as zero. A few respondents answered the question as zero; these were retained as zeros (despite the conflict with their previous answer). Those who were not sure whether they had made any cycling trips or who were routed to the question but left it blank were excluded from the analysis. In addition, values above 71 were excluded. (This number was chosen because 70 is the highest number of weekly cycle trips reported by a participant in the NTS 2002-2017.) In total, less than 1% of all survey respondents were excluded for these reasons.

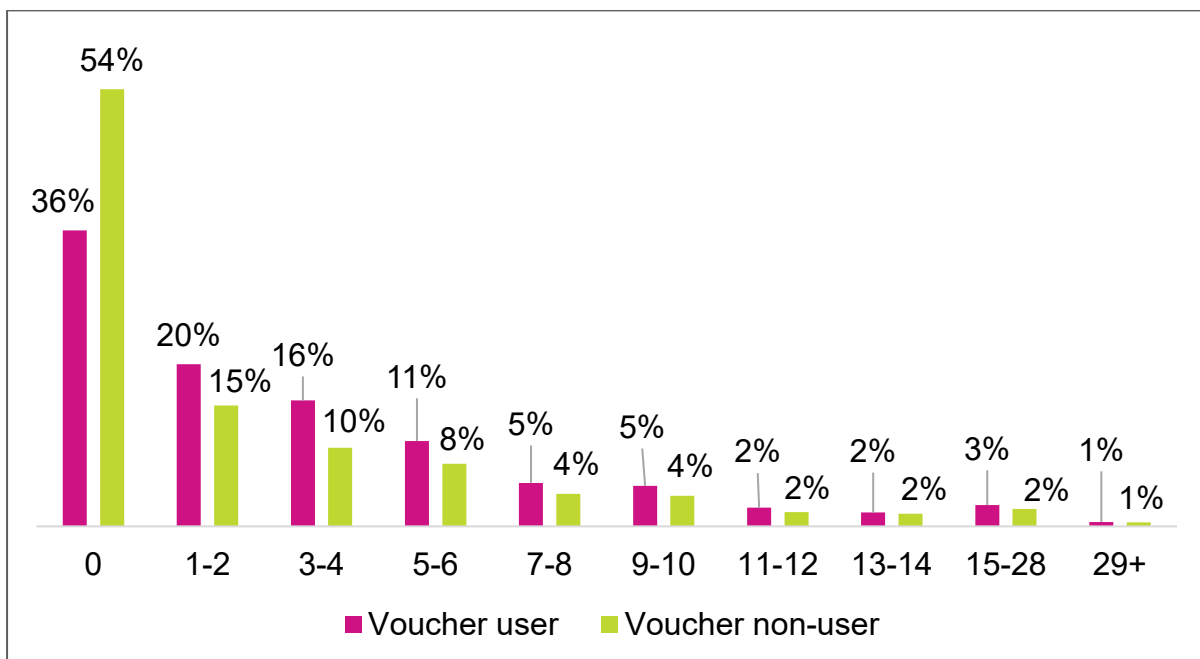


- On average, in the week before the survey, voucher users were making 3.6 cycle trips per week, compared to 2.8 trips per week for voucher non-users – a statistically significant difference of 0.9 trips.<sup>24</sup>

Looking at occasional cyclists (those cycling less than once a week when applying for a voucher):

- On average, in the week before the survey, voucher users were making 1.6 cycle trips per week, compared to 0.6 trips per week for voucher non-users – a statistically significant difference of 1.0 trips.

**Figure 16: Number of cycle trips made in the seven days before the survey**



**Table 1: Average number of cycle trips made in the seven days before the survey**

	Number of cycle trips				Average
	0	1-4	5-10	11+	
Voucher users	37%	36%	21%	7%	3.6
Voucher non-users	54%	25%	16%	6%	2.8
Occasional cyclist voucher users	58%	33%	8%	2%	1.6
Occasional cyclist voucher non-users	83%	14%	3%	0.5%	0.6

<sup>24</sup> Difference calculated before rounding.

## 8.4. Longevity of change

Vouchers were redeemed over a period of 16 months before people completed the survey.

To assess whether increases in cycling were a ‘novelty’ effect occurring immediately after having a cycle serviced or repaired, or whether behaviour change was sustained, measures of ‘positive’ cycling behaviour were examined in relation to the length of time since voucher use.<sup>25</sup> Findings are summarised in Table 2.

**Table 2: Proportion of voucher users reporting positive cycling behaviour, categorised by length of time since voucher use**

Percentage of voucher users...	Time since voucher use (in days)				
	Up to 90	>90 to 180	>180 to 270	>270 to 360	>360
...cycling ‘more’ at the time of the survey than when applying	60%	58%	57%	57%	57%
...cycling in the last seven days	67%	64%	65%	67%	58%

There was a small reduction in the proportion of voucher users reporting that they were cycling more since originally applying for a voucher, or cycling in the week before the survey, if they were completing the survey more than 90 days (approximately three months) since using a voucher. However, it is notable how little difference any time lapse made to the results.

## 8.5. Summary

Twelve months before applying for a voucher, and also at the time of applying, on average, voucher users cycled slightly less than non-users.

In the follow-up survey, voucher users reported cycling more than non-users. This was apparent from responses to several questions:

- At follow-up, 73% of voucher users were cycling at least once a week – compared to 56% of non-users.
- In the seven days before the follow-up survey, 64% of voucher users had cycled – compared to 47% of non-users.
- 66% of voucher users reported that there had been a period of time when they had cycled more, since applying for a voucher – compared to 33% of non-users.

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<sup>25</sup> The number of days between people using their voucher and completing the survey was calculated, with results banded into 90-day periods (approximately three months).

- 57% of voucher users reported they were cycling more at the time of the follow-up survey than when they applied for a voucher – compared to 24% of non-users.
- 24% of voucher non-users reported that that they were cycling less at the time of the follow-up survey than when they applied for a voucher – compared to 7% of voucher users.

Differences in reported cycling behaviour were particularly marked for those who were occasional cyclists (cycling less than once a week) at the time of applying for a voucher. In this group, at the time of the follow-up survey:

- 46% of voucher users were cycling at least once a week – compared to 18% of non-users.
- 43% of voucher users had cycled in the previous seven days – compared to 18% of non-users.
- 72% of voucher users reported they were cycling more than when they applied for a voucher – compared to 26% of non-users.

Comparing trip numbers for all voucher users and non-users in the seven days before the follow-up survey, there was a statistically significant difference of 0.9 cycle trips per person per week (3.6 compared to 2.8 cycle trips per person per week respectively).

Analysis of two measures of 'positive' cycling behaviour by time period since voucher use suggested that increases in cycling were largely sustained over the 16 months since the first voucher release.

## 9. Factors associated with changes in cycling behaviour

### 9.1. Reasons for cycling more

Respondents who reported that they were cycling more since applying for a voucher were asked why this was. Respondents could select multiple options (with 65% choosing more than one reason). Results are shown in Figure 17.

For voucher users, the most common reason was 'bike improvements paid for using the voucher' (71%).

For both voucher users and non-users, the next most common reason was 'cycling more for sport, fitness or leisure' (46% voucher users; 48% non-users).

The remaining responses were similar for voucher users and non-users with the following exceptions:

- '(Other) bike improvements (including non-voucher repairs or getting a different bike)' – 11% voucher users; 38% non-users.
- 'Weather is better or days are longer' – 18% voucher users; 24% non-users.

The role of cycle improvements (whether funded by a voucher or not) stands out, and was also mentioned in the customer interviews.

*"I'd like to say I'd have paid to get my bike serviced at some point even without the voucher but I doubt it. Just not enough money or time.... I've definitely been cycling more, as a direct result of having the bike serviced. And because of it, I ended up buying bikes for my son, daughter and wife."*

*[Voucher User Interviewee]*

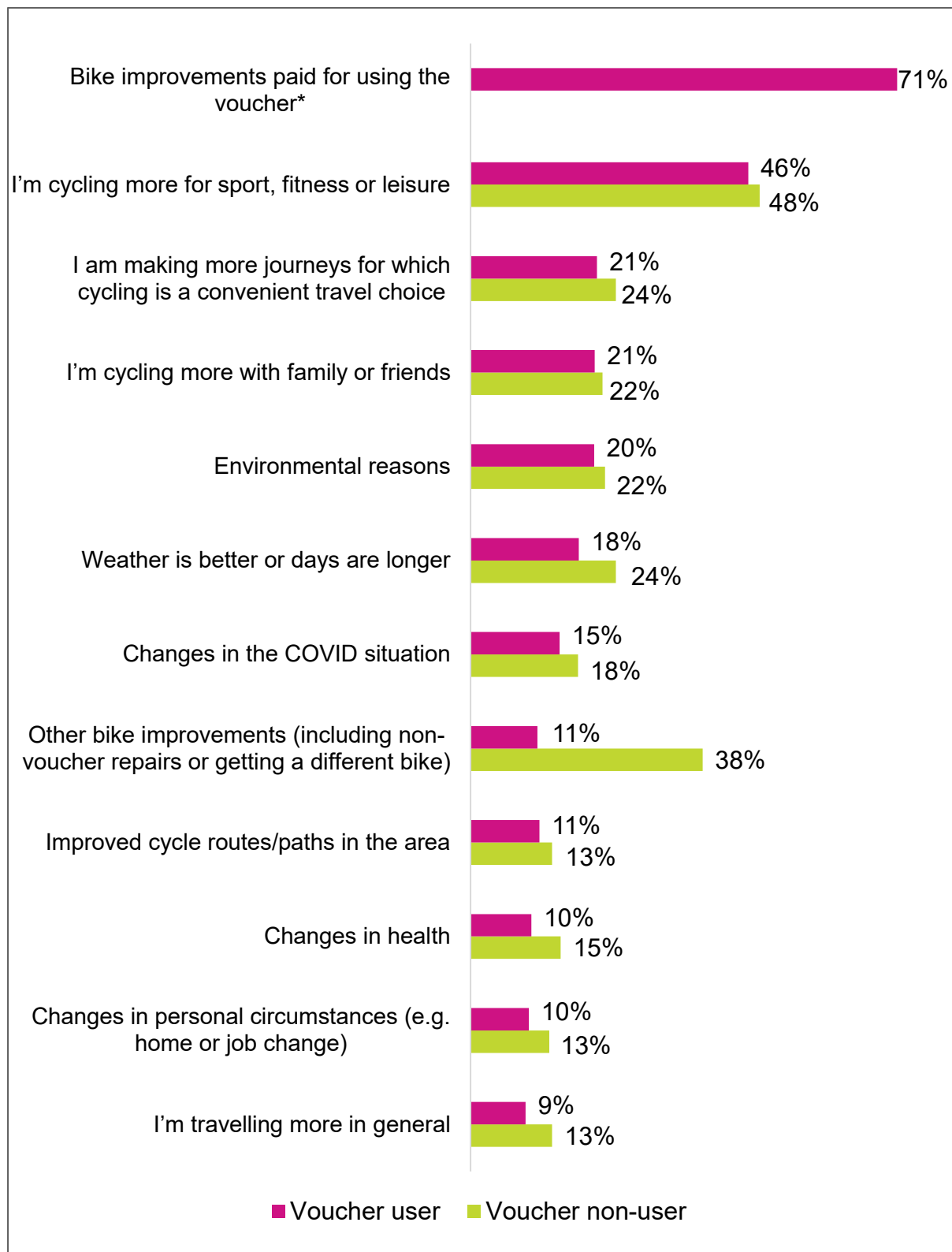
*"I would've got my bike serviced, but it'd have taken me longer to do it. So the voucher was kind of incentivising – to get on with it.... He came and did the repair and I was on the bike and have been using it ever since. I take it into the village. It's got a basket on the front, so I can do my shopping...or I bomb around the park. I use it now about three times a week. I hadn't been cycling at all before."*

*[Voucher User Interviewee]*

Wanting to get fit, or use cycling as a means to exercise and socialise with family and friends were also key themes for some interviewed. One interviewee had a child seat fitted to her cycle at the same time as her service; and another had started riding with a cycling club set up on Instagram.

One other factor mentioned by three interviewees (in March 2022, when interviews took place) was the cost of petrol as a factor in their choices about using their cycle. In light of the rise in energy costs and the related cost of living crisis, people may be more aware of petrol costs and having a working cycle may be contributing to some of them being able to continue to travel cost-effectively.

**Figure 17: Reasons for cycling more** (multiple choices possible)



\* Option for voucher users only.

For some interviewees, it was clear that cycle repair was only one factor in a complex set of reasons for changes in their cycling habits.

*“You couldn’t just say it was the scheme on its own. It might be Covid related. It might be that I’m taking personal fitness more seriously. It might be that I’m thinking more about petrol use. The other thing that’s happened around our way is there’s been a huge investment in cycle lanes and paths. I think a number of things have come together or changed over the past two years. The scheme came at the right time and has been one more factor that’s encouraged me to use the bike more.”*

*[Voucher User Interviewee]*

## 9.2. Reasons for cycling less

Respondents who said they were cycling less since the time of applying for a voucher were asked why. Respondents could select multiple options (though 61% only chose one). Results are shown in Figure 18.

The differences between voucher users and non-users were much starker here, including three gaps of at least 10 percentage points:

- ‘Bike problems (e.g. bike unusable or needs work)’ – 9% voucher users; 40% non-users.
- ‘Changes in personal circumstances (e.g. home or job change)’ – 28% voucher users; 16% non-users.
- ‘Weather is less good or days are shorter’ – 26% voucher users; 15% non-users.

The pronounced difference between voucher users and non-users in choosing ‘bike problems’ as a reason for cycling less suggests that the voucher scheme helped remove mechanical problems from the range of barriers to cycling.

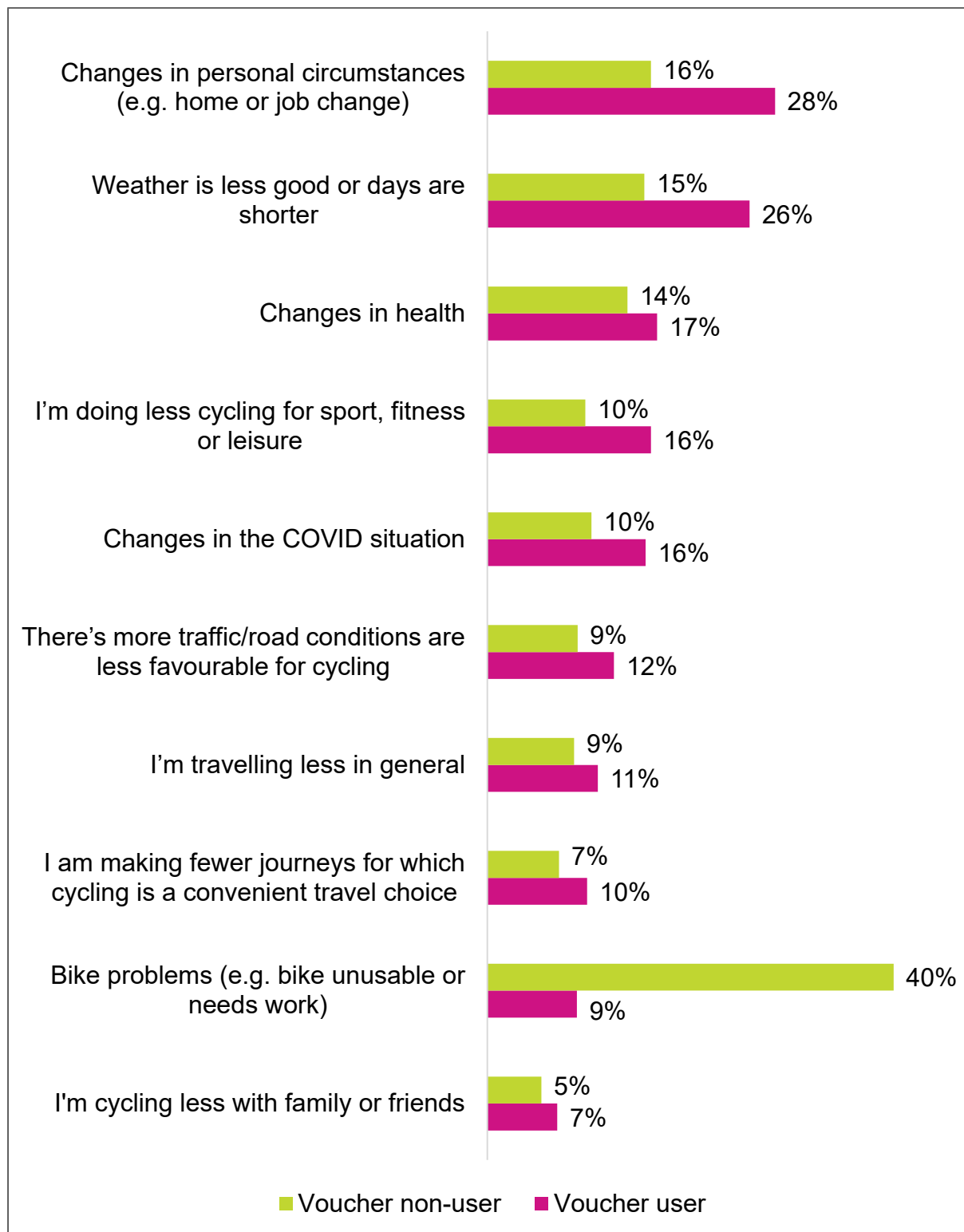
One male interviewee who had used a voucher to get his cycle repaired nevertheless stated that he was now cycling less. The reason for this was that overgrown vegetation was blocking the cycle path he had used to get to work, and he was not confident to cycle on the 60mph road he would need to use instead. Another male interviewee, who had not used his voucher, stated that the bespoke case that he used to carry his musical instruments to university on his cycle had broken. This meant he could only safely get his musical instruments to university when he walked. He noted that if he could get his case repaired, cycle problems could still prevent him cycling.

Again, this highlights that cycle repair (or disrepair) is only one factor affecting changes in cycle behaviour – although the survey data suggests it may often be an important one. One voucher non-user who reported cycling ‘more’ still said that she was cycling less than she wanted:

*“I have been cycling less than I’d have done with the work done. Because the shop told me about these problems with my bike, I’ve been apprehensive because I didn’t know whether it was safe to use it. So I’ve just been going to the allotment, getting some exercise and doing some other trips when I don’t have anything to carry.... I’m a health care worker and I needed to get to work. I was going to use my bike to get to and from work.”*

*[Voucher Non-User Interviewee]*

**Figure 18: Reasons for cycling less** (multiple choices possible\*)



\* Respondents were also offered an 'other choice', which about a fifth of both groups chose. Responses given included details about why they had been unable to use a voucher, or why using a voucher had not fixed all cycle issues; people reporting that their cycle had been stolen; and other reasons that were compatible with the options given (such as more details of a medical issue or family change).



### 9.3. The importance of seasonality

The general effects of seasonality on cycle behaviour are well-evidenced: volumes of cycling vary considerably over the year so that on average, July sees more than two and a half times as much cycling as December.<sup>26</sup>

The majority of vouchers (56%) were used in spring, followed by summer (24%), autumn (11%), and winter (8%).<sup>27</sup> This probably mainly reflects the timing of voucher releases, since three-quarters of the vouchers were made available in early spring 2021.

According to the survey data, occasional cyclists were slightly more likely to use a voucher in the summer (26%), and less likely to use it in the autumn/winter (17%), compared to regular cyclists (summer 23%; autumn/winter 21%).

However, the season of voucher redemption appears to have made little difference to subsequent reported cycling behaviour. For example:

- 57% of those using a voucher in the spring reported that they were ‘cycling more’ at the time of the survey than when they applied – compared with 58% redeeming a voucher in summer; 56% in autumn and 56% in winter.
- 64% of those redeeming a voucher in the spring reported that they had cycled in the seven days prior to the survey in October – compared with 62% redeeming a voucher in summer; 66% in autumn and 67% in winter.

It is possible that there was a small effect from seasonality – namely that those using a voucher in the summer were slightly less likely to be cycling in the seven days before the October survey, though this may also reflect that a slightly higher proportion of people who used a voucher at this time were occasional cyclists.

This finding suggests that it is not essential to time cycling incentive schemes, such as Fix Your Bike, to coincide with the spring and summer; such schemes may be effective throughout the year.

### 9.4. The importance of traffic levels

There was a large drop in traffic during the first lockdown of the pandemic. Traffic levels then fluctuated between the first voucher release and the survey, with the biggest dip occurring during the winter of 2020/21 (see Figure 19).<sup>28</sup>

To examine the effect of traffic at the time of voucher use on subsequent cycling behaviour, traffic levels were converted into five bands, each of 11 percentage points, as follows:

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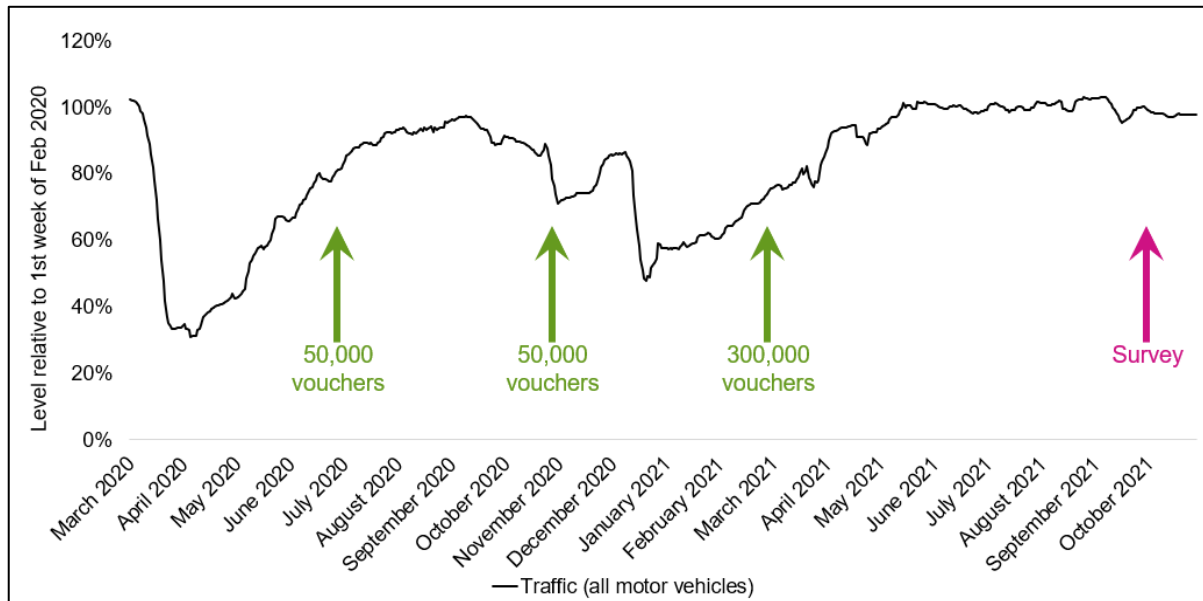
<sup>26</sup> DfT Road Traffic Statistics, Table TRA0404 (2012-2016 average).

<sup>27</sup> Data for all voucher users, not just survey respondents.

<sup>28</sup> Analysis was based on DfT statistics on use of transport modes during the pandemic. The figures for all motor vehicles were used, smoothed by calculating a seven-day rolling mean. Quoted volumes are relative to the quantity in the first week of February 2020 (before the introduction of any restrictions).

- **Band 1:** 48-58% of pre-pandemic traffic levels
- **Band 2:** 59-69% of pre-pandemic traffic levels
- **Band 3:** 70-80% of pre-pandemic traffic levels
- **Band 4:** 81-91% of pre-pandemic traffic levels
- **Band 5:** 92-102% of pre-pandemic traffic levels

**Figure 19: Traffic volumes over the period of the Fix Your Bike scheme**



A relatively small number (4%) of people used vouchers during times when traffic was lowest (Bands 1 and 2). The proportions who used a voucher at other times were:

- 21% – Band 3
- 18% – Band 4
- 57% – Band 5

Thus, most voucher users received their repaired/serviced cycles when traffic levels were normal; and those that received their repaired/serviced cycles when roads were quieter did so during winter.

As with seasonality, traffic levels at the time of voucher redemption had little effect on subsequent cycling behaviour. For example:

- The proportion of voucher users who reported they were cycling ‘more’ at the time of the survey was between 57% and 58%, for all five traffic bands at the time of voucher use.
- The proportion of voucher users who reported that they had cycled in the seven days prior to the survey was between 63% and 67%, for all five traffic bands at the time of voucher use (with the small variation more likely to be associated with whether they were regular or occasional cyclists, rather than traffic levels at the time of voucher use).

## 9.5. Summary

Amongst those who were cycling more at the time of the survey, the most common reason given was the repairs/servicing funded by vouchers (chosen by 71% of voucher users). Both voucher users (11%) and non-users (38%) also credited other cycle improvements (including non-voucher repairs or getting a different cycle) as a reason they were cycling more. Qualitative interviews suggested that the decision to cycle more was the result of multiple factors, of which the voucher scheme was one. Taken together, these findings suggest that cycle repairs may be an important enabling factor in cycling increases.

Amongst those who were cycling less, 40% of voucher non-users cited cycle problems as a reason, compared to only 9% of voucher users. This suggests that the scheme had substantially improved the roadworthiness of participants' cycles.

Analysis of seasonality and traffic levels at the time of voucher use showed that these had little effect on whether vouchers were used, or on reported cycling behaviour at the time of the follow-up survey in October 2021.

## 10. Other impacts of the scheme

### 10.1.Changes in journey purpose

Respondents were asked for what journey purposes they cycled, both at the time of applying for a voucher, and at the time of the follow-up survey. Multiple options could be selected. Results are shown in Figure 20 and Figure 21.

In both time periods, exercise and recreation was the most commonly mentioned reason for cycling, by both voucher users and non-users. Work, visiting friends and family, and leisure/social reasons were the next most commonly reported purposes.

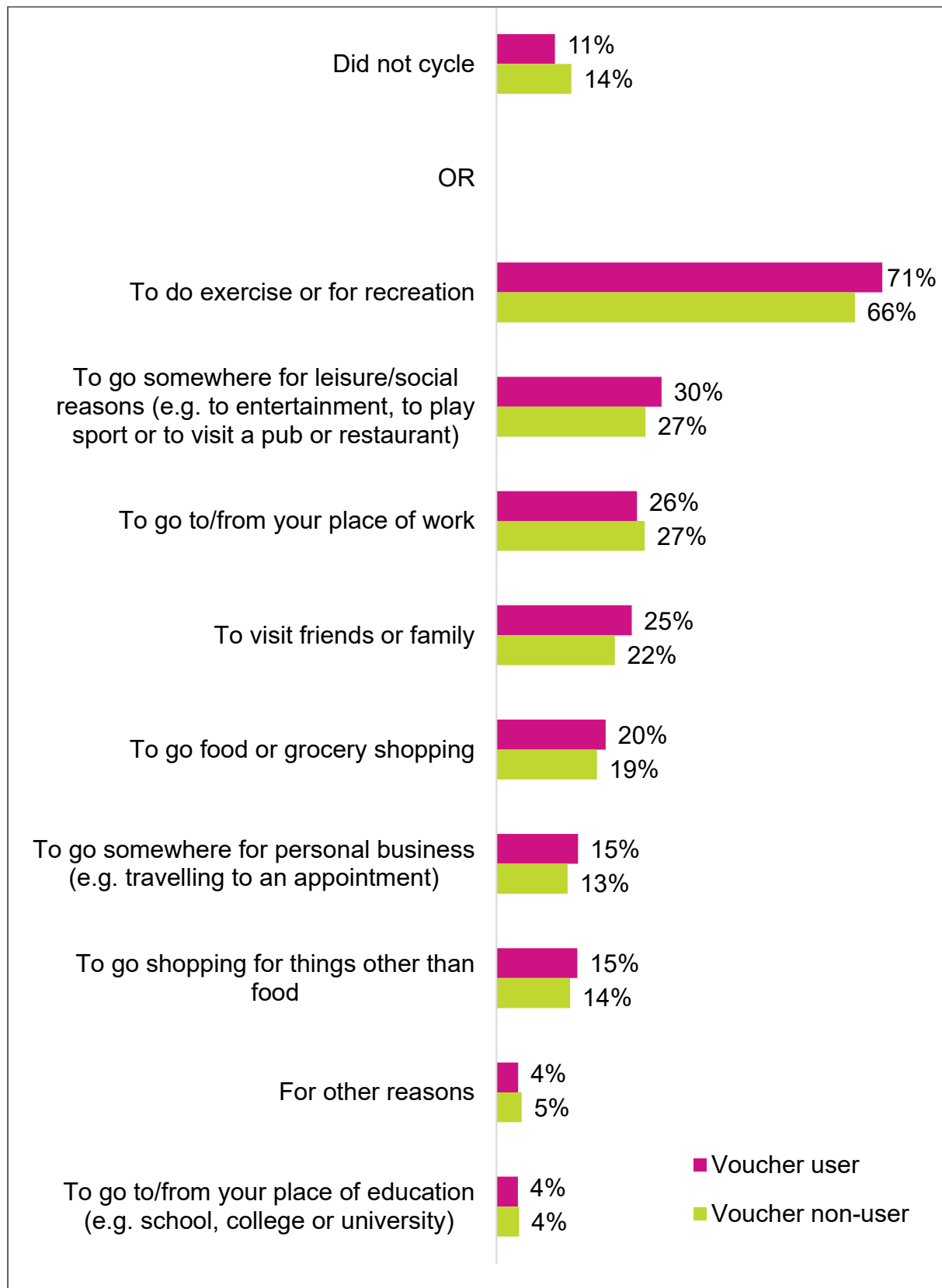
Key findings are:

- At the time of applying, voucher users and non-users used their cycles for similar purposes. Just over half of both groups only selected one option (including those reporting that they did not cycle).
- At the time of answering the survey, responses for voucher non-users were relatively unchanged.
- In contrast, for voucher users, the proportion using their cycle for more than one journey purpose was substantially increased, to nearly two-thirds of the sample. Cycling had become more common for all trip purposes, compared to when people applied. The largest increases were in the percentages reporting that they were now cycling to visit friends and family or for other social/leisure reasons.

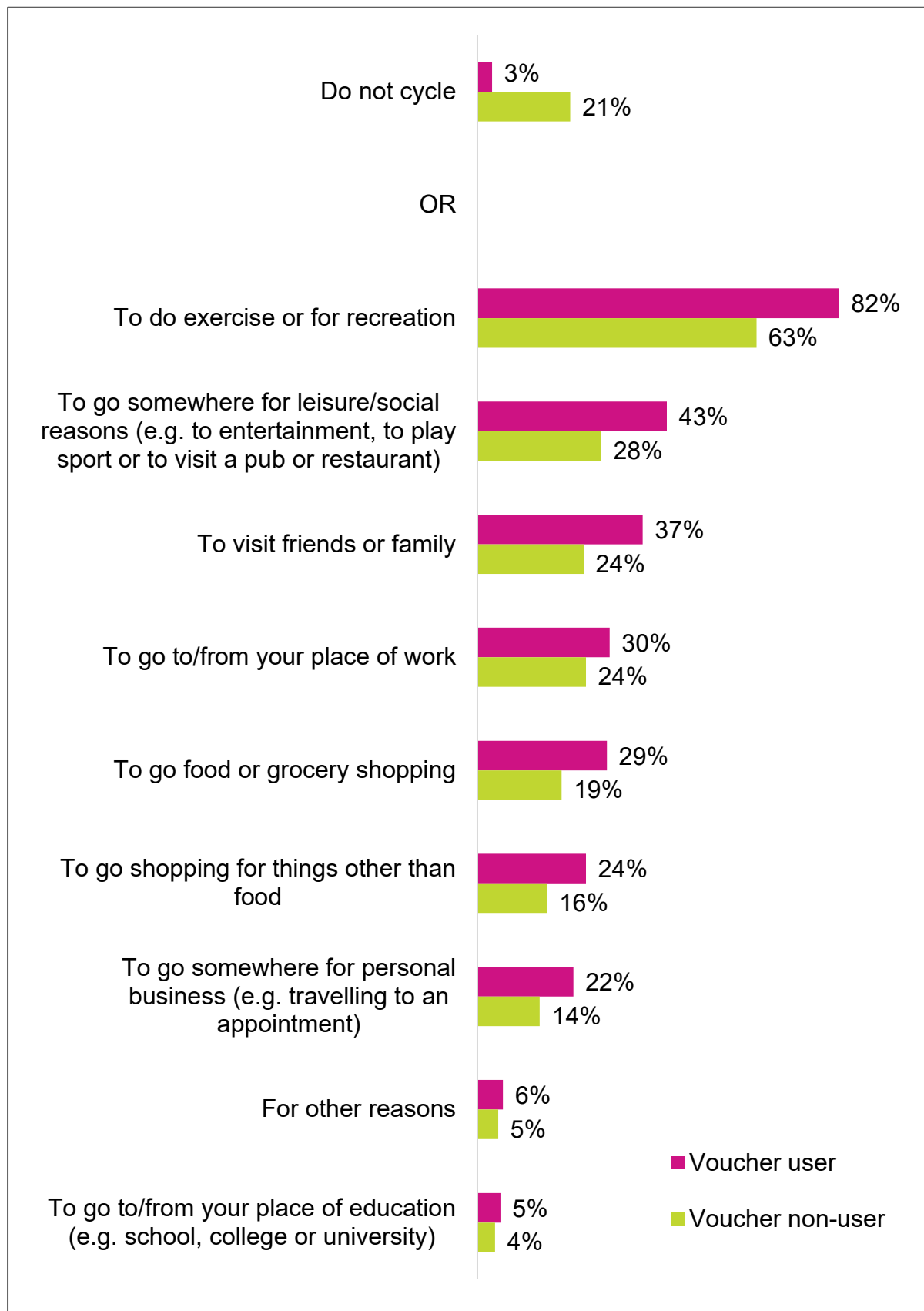
The diversification in journey purposes cycled by voucher users was also evident from the qualitative interviews. Leisure, social and retail trips were mentioned as the purpose of new cycle journeys more frequently than commuting trips. This may partly reflect commuting trips becoming a less significant part of weekly travel patterns for certain sectors of the workforce following the pandemic.

For example, one voucher user reported that she was now cycling to the gym and into town, as well as on regular leisure rides. She was still commuting to work by bus but not going into the office as regularly. On weeks when she did not buy a bus pass, she was using her cycle more.

**Figure 20: Journey purposes cycled at the time of applying for a voucher**  
 (multiple choices possible)



**Figure 21: Journey purposes cycled at the time of the follow-up survey**  
 (multiple choices possible)



## Perceived impacts on cycling experience

Voucher users were asked whether the repair or service had made a difference to four aspects of using their cycle. Results were as follows:

- 87% thought that the repair or service had improved the safety of their cycle.
- 83% thought the repair or service had made their cycle more enjoyable to ride.
- 60% reported that the process had identified issues with their cycle that they were unaware of.
- 70% reported that having the repair or service had made them feel more confident about cycling.

These results were similar for people who had been regular or occasional cyclists at the time of applying for a voucher. The biggest difference was that occasional cyclists were more likely to say the repair work had made them more confident about cycling (74% of occasional cyclists, compared to 68% of regular cyclists).

## 10.2. Mode shift

As well as impacts on cycling behaviour, another important issue is whether the scheme encouraged people to make trips by cycle that were previously made by car or van.

The scheme appealed to car owners, with 90% of all survey respondents reporting that their household owned, or had available to use, at least one car. Car ownership was similar for voucher users and non-users.

At the time of registering, all applicants were asked (i) what they would mainly use their cycle for, and (ii) for that journey purpose, what mode of travel (if any) it would replace (with only one answer option possible). The answers to this question are shown in Table 3. They indicate:

- 39% of respondents thought that they would use their repaired cycle to replace car trips (while 29% were planning to make new journeys; 15% to replace walking or other active travel; 14% to replace public transport use and 3% to replace use of a different cycle).
- Compared to voucher non-users, voucher users were slightly more likely to anticipate replacing car use (40% compared to 38%).

The most common journey purpose for which respondents predicted cycling would replace driving was 'cycling for exercise or recreation'<sup>29</sup>, followed by 'journeys to a place of work or education'.

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<sup>29</sup> This presumably suggests substituting leisure cycling trips for driving to and from other leisure activities.



**Table 3: Intended journey purpose and relationship to existing travel**

	What mode of travel (if any) main cycle use would replace					
	Car	Public transport	Walking or other active travel	Cycling with different bicycle	New journeys	Total
Cycling for exercise or recreation	17%	4%	12%	2%	24%	60%
Journeys to a place of work or education	16%	8%	2%	1%	3%	30%
Other general use e.g. shopping, visiting friends or family, reaching appointments	6%	2%	1%	0.3%	1%	11%
<b>Total</b>	<b>39%</b>	<b>14%</b>	<b>15%</b>	<b>3%</b>	<b>29%</b>	<b>100%</b>

Later, at the time of the follow-up survey, respondents were asked two questions about cycle-car substitution.

First, “Since you applied for a Fix Your Bike voucher, have you started cycling for any trips that you previously made by car or van?” (answer options ‘yes’, ‘no’ or ‘don’t know’):

- 53% of voucher users, compared to 27% of non-users, reported that they had started cycling for trips previously made by car or van.

Second, those who had cycled in the last seven days were asked “In the past seven days, how many miles have you cycled that you would previously have made as a car or van driver? (If appropriate, please put 0)”.<sup>30</sup> Results are shown in Figure 22.

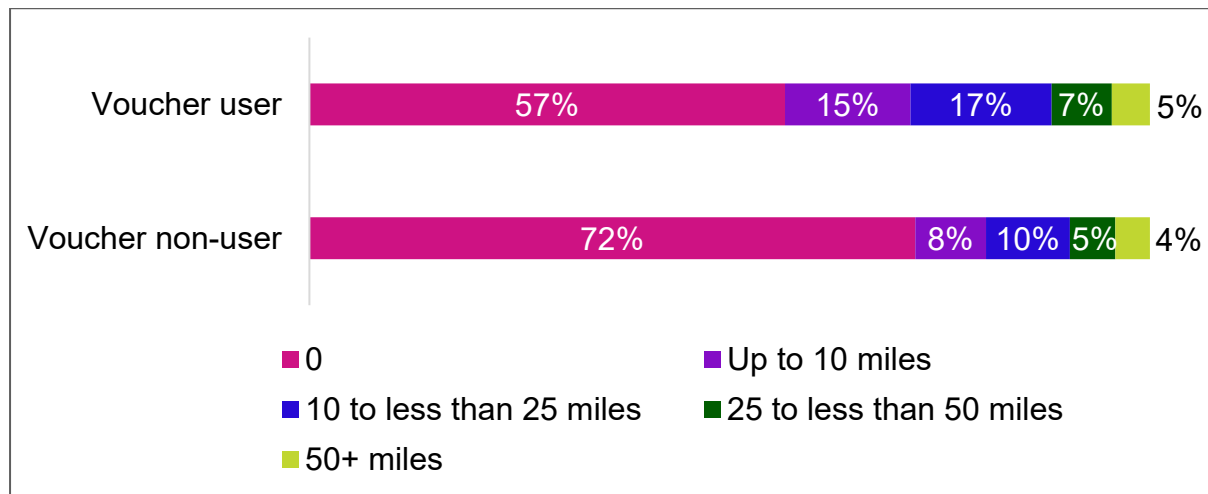
The data show:

- 43% of voucher users had replaced car travel with cycle use in the previous seven days, compared to 28% of voucher non-users.
- Including those who had not cycled in the past seven days, and those who had cycled but not replaced car travel, voucher users reported that they had cycled an average of 8.9 miles in the previous seven days that they would previously have driven, while non-users reported that they had cycled an average of 7.0 miles, a statistically significant difference of 1.9 miles.

<sup>30</sup> Respondents were asked to give their best estimate or to leave the question blank where that was not possible; blanks were treated as zero. Those who had not cycled in the previous seven days were assigned a value of zero. Those who were routed to the question but did not answer, and values of over 200, were excluded from the analysis. Less than 1% of the total sample was excluded on that basis.

- Amongst respondents who were only cycling occasionally at the time of application, voucher users had replaced an average of 4.6 car miles, compared to 1.8 car miles for voucher non-users, a statistically significant difference of 2.8 miles.
- Voucher non-users who got their cycles repaired anyway had replaced an average of 10.7 car miles in the preceding week, reinforcing earlier evidence indicating that this group was largely comprised of frequent cyclists.

**Figure 22: Car miles replaced by cycle use in the previous seven days**



Two of the voucher users interviewed said they were now cycling for journeys they had previously done by car. One interviewee stated that, before it was repaired, he was only using his cycle for the odd trip out to socialise. Afterwards, he began using it for shopping and leisure rides too. In the week before completing the survey, he had only done one trip by cycle that he might otherwise have done by car but saved 10 car miles in this single trip:

*“I’m using it more for recreation – more so in the summer. I think I’m a bit of a fair-weather cyclist! But I might pop to the Post Office on it or something, whereas I might have taken the car for something like that.”*

*[Voucher User Interviewee]*

Another voucher user had been a semi-regular weekend cyclist before having his cycle repaired. Afterwards he felt that, as the cycle was in good condition and he had spent money on it, he would put it to better use. So he began using it to get to the train station, rather than driving. Overall, in the week before completing the survey, he had saved 50 car miles on his commuting trips.

### 10.3. Impacts on physical activity

The scheme had the potential to increase physical activity, providing health benefits.

As already noted, ‘exercise and recreation’ was the most important reason that people were cycling. Respondents were asked about their physical activity in the past seven days, and the contribution of cycling to that activity.

Voucher users were more active than non-users in the seven days before the survey. 56% of voucher users (compared to 51% of non-users) reported that they were doing at least 2.5 hours of physical activity, the nationally recommended amount (see Figure 23).

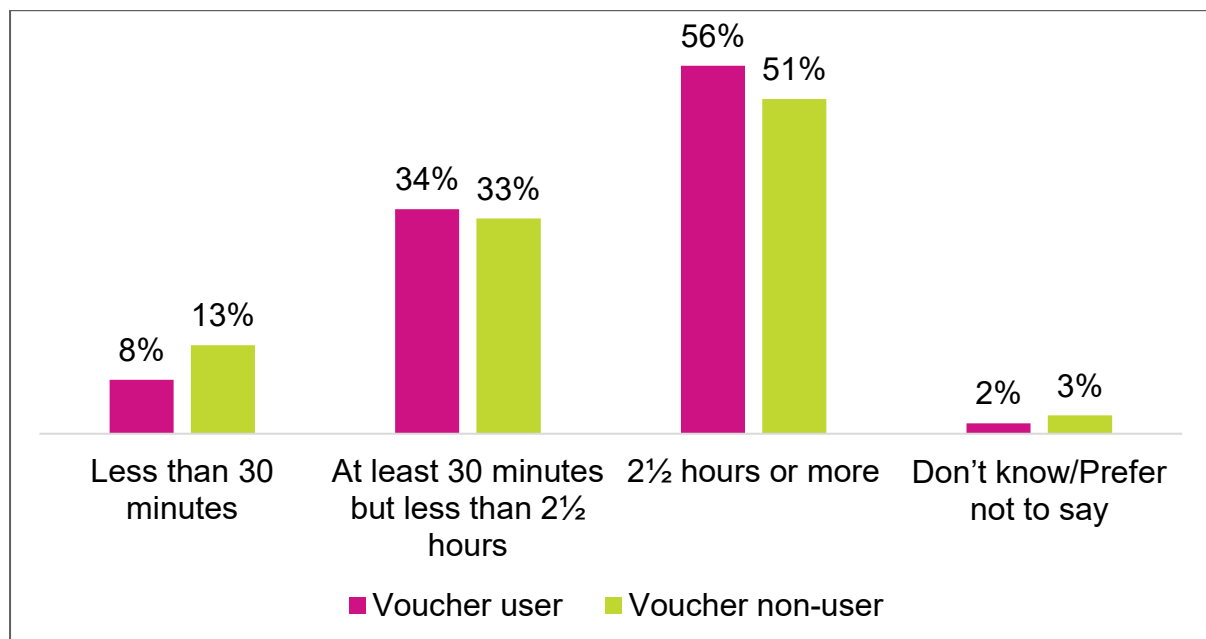
Cycling also made up a larger part of the total physical activity of voucher users, compared to non-users, as shown in Figure 24. Nearly three-quarters (73%) of voucher users reported that cycling was making more than a ‘minor’ contribution to their overall physical activity, compared with 53% of voucher non-users.

Various health benefits were mentioned in the interviews, including mental health benefits.

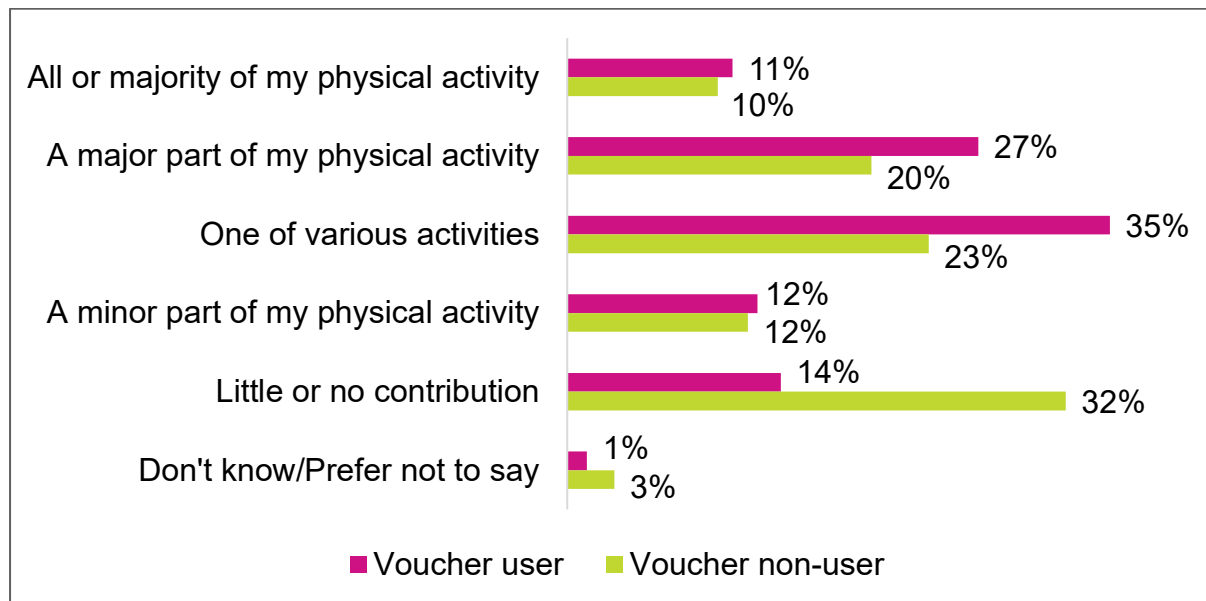
*“My fitness has improved and I’m getting out more. I went through a period of depression and then anxiety, and the bike was in the shed for ages. I wanted to use it but, because of how I felt, I didn’t want to take it into the bike shop. So the way it worked out was kind of perfect for me. I was quite isolated at the time.”*

*[Voucher User Interviewee]*

**Figure 23: Self-reported physical activity in seven days before follow-up survey**



**Figure 24: Reported contribution of cycling to physical activity undertaken in the seven days before follow-up survey**



## 10.4. Impacts on future cycle maintenance

The scheme had the potential to encourage people to get their cycles serviced more regularly, by providing a positive experience for people who had not used cycle repairers before.

In the survey, voucher users were asked whether they had paid for servicing/repair *since* using their voucher. Just under a quarter (24%) said they had. The first vouchers had only been released 16 months before the survey, with many survey respondents using them more recently than that, so the length of time in which respondents might have needed repairs or servicing since using their voucher was fairly short.

Of those who had paid for repairs or servicing since using a voucher, most (78%) had a history of paying for such work. However, the qualitative interviews suggested that there may have been impacts on a wide range of participants. In the interviews with voucher users, seven people stated that, as a result of the scheme, they were likely to get their cycle serviced again in the future.

*“Of course I’d be more likely to get my bike serviced in the future. It ran a lot better after it was repaired.”*

*[Voucher User Interviewee]*

*“Now we all have bikes, I think I’ll make an effort to get our bikes serviced and repaired in the future. I’m useless at that sort of thing, so I’ll definitely take them to a bike shop. The reason my bike got in the state it was in to begin with was because it’d had no maintenance whatsoever. Now I’ve bought three new bikes for my family, I want to try and keep them in working order for us as long as possible.”*

*[Voucher User Interviewee]*

One respondent had been motivated to go on a cycle maintenance course:

*“There are certain things I wouldn’t dare touch, like the gears. So I’m going to get it serviced every 6-12 months, but I can take the wheels off now and change an inner tube. I learnt enough to do basic repairs.”*

*[Voucher User Interviewee]*

In interviews, some voucher users who said they were not likely to pay for a professional service in the future still stated that they had a greater appreciation of the importance of maintaining a roadworthy cycle.

Two voucher non-users also reported that taking part in Fix Your Bike had made them more aware of the issues with their cycles and the need to get them repaired.

*“I wouldn’t have been aware of the problem with my bike if I hadn’t gone there [to get a quote]. If something’s wrong with your car, you notice a noise or whatever but you don’t always notice that with a bike.”*

*[Voucher Non-User Interviewee]*

## 10.5. Summary

### Journey purposes

Voucher users and non-users used their cycles for similar journey purposes at the outset. After their cycle was repaired, voucher users began to use their cycles for more journey purposes, especially for visits to friends and family, or for other social and leisure trips.

### Cycling experience

More than eight in ten voucher users considered that the repair or service had made their cycle safer (87%) and made riding it more enjoyable (83%). For 70%, the repair had increased their confidence about cycling, and for 60% the process had identified issues with their cycle that they had not been aware of.

### Car use

At the outset, nearly four in ten (39%) voucher applicants anticipated that once their cycle was repaired, they would use it for trips previously made by car. At follow-up, 53% of voucher users reported that they had started cycling for trips previously made by car or van, compared to 27% of non-users. At follow-up, voucher users reported that they had cycled for an average of 8.9 miles in the last week that they would previously have driven. The equivalent distance for voucher non-users was 7.0 miles – a statistically significant difference of 1.9 miles.

### Physical activity

At follow-up, voucher users were more active than voucher non-users: 56% were meeting Government guidelines for physical activity, compared with 51% of voucher non-users. Nearly three-quarters (73%) of voucher users reported that cycling was

making more than a 'minor' contribution to their overall physical activity, compared with 53% of voucher non-users.

### Cycle maintenance

The survey data do not indicate that the scheme fostered a culture of servicing/repair, since only 24% of voucher users had paid for repairs or servicing since using a voucher, and nearly four-fifths of these people had a history of doing so. However, there was only a gap of 16 months at most since vouchers had been used. There was evidence from the qualitative interviews that the scheme made some voucher users more likely to consider having their cycle serviced again, and that some voucher non-users had become more aware of cycle maintenance issues.

## 11. Business perspectives

### 11.1. Introduction

This chapter explores the perspectives of businesses participating in the scheme, based on a survey of 260 businesses undertaken six months after the start of the scheme (15% of those registered at the time); interviews with ten participating businesses after the end of the scheme; and discussions with the Energy Saving Trust (EST).

The standard process that businesses went through, from registering for the scheme to receiving payment for a voucher, is summarised in Appendix A.

### 11.2. How businesses heard about the scheme

Many participating businesses were recruited by EST before the public launch of the scheme. Those interviewed had heard about the opportunity through industry contacts, such as the Association of Bike Traders or other shops or repairers.

Some businesses signed up after the scheme had begun, having seen the launch on the Covid-19 daily briefing or coverage in the media. Others became aware of the scheme once customers began approaching them to ask if they were accepting Fix Your Bike vouchers.

### 11.3. Taking part

The businesses that were interviewed had all been keen to sign up to the scheme. Commercially, they thought the scheme would draw in new customers who might become repeat customers. They expected to generate additional sales from repairs, parts and/or accessories not covered by a voucher, or from other cycles for which households did not have a voucher. Larger retailers thought it would raise awareness of their cycle workshops and departments.

The businesses were aware of the health, well-being and sustainability arguments for cycling and were keen to help more people gain from these. Some hoped that the scheme might help more deprived parts of their community. They were also aware of the safety benefits of the scheme that would result from fixing faulty tyres or brakes.

Businesses reported that the scale of activity had been substantial but was complementary to their usual activities. For example, one business interviewee, a mobile cycle mechanic in the North West, reported that about 65 voucher users used their voucher with him, accounting for about 10% of the 600 new customers he attracted during the pandemic.

Another business interviewee, the manager of a London chain retailer, estimated that his store helped about 15-20 voucher users a month during the scheme – equivalent to about 10% of all their cycle repair customers at that time.

### 11.3.1 Voucher value and validity

Most of the businesses interviewed thought £50 was an appropriate value for the vouchers. Some thought an increase in value, to around £75, would have been better. One business suggested that the scheme might have been more flexible:

*“The ability to put vouchers back into the system would have helped, so if a bike was unrepairable, someone else could have benefitted instead. Or to have been able to switch to using the voucher for £50 off a replacement bike.”*

*[Business Interviewee]*

One interviewee felt that the voucher value was not sufficient for repair and servicing of electric cycles. This might also be an issue for adapted cycles, or trikes for disabled people, or cargo cycles for families. Others mentioned that it would have been helpful to be able to use vouchers for accessories. For example, these might include lights, locks, helmets, bells, reflectors, child seats, panniers, baskets, trailers or tagalongs. This was also mentioned by customers:

*“It was really frustrating I couldn’t use the voucher towards accessories. It would be great if I could have put some towards a helmet, so I could ride it on the road and commute with it.”*

*[Voucher User Interviewee]*

*“Perhaps next time the scheme could offer additional vouchers for safety-related items, even if it’s only £10 towards the cost of a helmet or lights.”*

*[Voucher User Interviewee]*

Although voucher non-users identified voucher expiry as a reason for not using vouchers, it is notable that the interviewed businesses generally felt that the validity periods were adequate. They appreciated the extension periods EST gave in order to allow for the time and supply pressures caused by the pandemic, and felt that two to three months would be sufficient in normal circumstances.

### 11.3.2 Scheme administration

In the business survey, undertaken six months into the scheme, over a third (37%) of business respondents had experienced an issue. The biggest problem, experienced by 60%, was obtaining parts in a period when demand was high and supply chains were compromised by the pandemic.

Also, at that point, just under a third (31%) of businesses were experiencing problems with processing and payment of vouchers. This proportion is likely to have dropped over time, as shops became familiar with the process and EST streamlined their administration. Business interviews, which took place after the end of the scheme, identified few problems with the operation of the scheme.

Business interviewees felt the scheme was robust to exploitation, and that the vast majority of people engaged in the scheme in line with the spirit intended.

*“It was a really nice way to work – with me and the customer wanting to improve the bike and knowing the Government was helping us to do that... People were really grateful for their vouchers.”*

*[Business Interviewee]*



The most challenging issue was that businesses had to manage customer expectations about what £50 would cover, as many customers were unaware of the cost of cycle parts, or did not appreciate the amount of work their cycle required to make it operational and safe.

*“Customers sometimes expected that the £50 voucher would cover everything. So they could be surprised if the quotation was more, and we would have to manage that expectation, as we are known to offer good value for money.”*

*[Business Interviewee]*

For any future scheme, putting example costs of key components, services or specific types of repairs on a scheme’s website could provide voucher recipients with a point of reference.

Business interviewees thought that the information provided by EST was comprehensive; the online portal for administering vouchers was easy to use; and the process to reclaim money was straightforward. While some had experienced difficulty making contact with EST to resolve minor issues, there was a general appreciation of the pressure EST had been under, mobilising the scheme at pace, especially during the pandemic.

*“Although there were teething problems, when you look at the scheme overall, a lot of cycle businesses appreciate that, at that point in time, a lot of businesses couldn’t even open, but we could, and the Government was actively supporting what we were doing. As it was put together so quickly, the team behind Fix Your Bike deserve a big high five, really. It must have been a big job. The whole idea was well intended, and of course, as with many things in life, there are probably refinements that could be made if they were to do it again, but it was incredible what they did.”*

*[Business Interviewee]*

### 11.3.3 Failure to redeem vouchers

Although businesses were generally happy with the scheme administration, some experienced problems with receiving payment for vouchers, for several reasons.

Some businesses were deemed ineligible when they first sought to redeem vouchers, because they failed to meet the participation criteria or could not provide the required evidence.<sup>31</sup> Although they had accepted vouchers and completed repairs/services, they were unable to complete the redemption process and reclaim the voucher cost.

Second, businesses did not always have all the information required for the repayment to be processed. One chain retailer, despite issuing guidelines to stores

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<sup>31</sup> Typically, this was due to not having a business bank account and/or not having an insurance certificate showing they were covered for £2 million public liability insurance for bicycle repairs, as required by the terms and conditions for businesses signing up to the scheme. Initially, as agreed with DfT, EST checked the eligibility of 50% of businesses at the point of registration. Eligibility checks were conducted for all businesses by December 2020.

about how to process vouchers and capture the information required to redeem them, was unable to claim for about 13% of the vouchers it accepted:

*“If just one piece of information was missing, we couldn’t claim for it. For example, on our till system, we give people the option of giving us their e-mail address. Even though they can opt out of marketing emails, a lot of the time you’d get a “no” to this. Then that meant we couldn’t claim the voucher. We even had a central team working on this, and paid companies to try and find the missing data right up to the last deadline.”*

*[Business Interviewee]*

However, the volume of vouchers that could be successfully redeemed, and the additional spend by customers on their repairs and buying accessories while in store, still made the scheme a success:

*“The amount of customers it drew in, we couldn’t complain. But it definitely had costs to it as well.”*

*[Business Interviewee]*

There may also have been other instances where, for internal reasons such as administrative difficulty or lack of time, a business did not process a voucher. In one case, a voucher user reported visiting a local shop that was not busy at the time. As she was a local customer, and likely to go back to the shop again, the owner was flexible:

*“When the shop typed in my voucher, they said it was expired. But the guy was like ‘oh don’t worry about it, we’ll sort it with the people at the voucher scheme’. So he still did my bike anyway and took the money off.”*

*[Voucher User Interviewee]*

## 11.4. Business satisfaction with the scheme

In the six-month survey of businesses, nearly two-thirds (64%) felt that the impact on their business had been positive, with the most significant impact being an increase in new and returning customers. A quarter (24%) thought the scheme had no impact on their business, and 8% felt that it had a negative impact. Three-quarters (75%) of businesses reported that they were satisfied with the scheme, 11% were neutral and 14% were dissatisfied.

At the end of the scheme, those interviewed felt that the scheme had met their expectations. They were keen to support similar initiatives in the future.

*“The scheme was perfect for helping people get their bikes fixed. You can’t just get on a bike and ride it if it hasn’t been looked after. So I think it helped change people’s perceptions of bikes a bit – in the sense that it wasn’t going to cost that much to get their bike fixed up and, when they did, they realised what it was like to ride a bike that works properly... it’s much faster and more fun.”*

*[Business Interviewee]*

*“It was a wonderful scheme to get more people out cycling and has had a positive impact on our business. I was a bit uncertain at the outset as to how it would work and what the impact would be. But from registering to redeeming [vouchers], there wasn’t an issue. Overall, it was an excellent experience.”*

*[Business Interviewee]*

## 11.5. The experience of large chain retailers

About 60% of vouchers were used at smaller and independent businesses, and about 40% at chain retailers.

Of vouchers redeemed by major chains, Halfords accounted for the majority, with the rest being dealt with by Cycle King, Evans Cycles, Decathlon and Go Outdoors. The proportion of vouchers redeemed by larger retailers was not always proportionate to the number of stores they had and was partly affected by whether the retailer marketed the scheme to their customers.

EST highlight that balancing their time between large and small businesses was important. However, they did put in place specific processes for large chains and invited them to register for the scheme separately. Rather than each head office registering their branches individually via the website, they could submit a list of stores for bulk upload. EST then worked with these retailers to set up bespoke voucher claim processes that could cope with large volumes of redemptions, and that would work within the constraints of the retailers’ operating procedures. For example, some chains were able to submit their claims for repayment using spreadsheets of information scraped from their internal till/administrative systems. Others chose for each store to process their own claims using the website. Where certain criteria were met, the need to provide a photo of the repaired cycle was waived.

At least one major retailer had an in-house team managing the process, and some adapted their internal systems or websites to allow online booking of repairs or to capture information for redemptions. One interviewee reported that their head office provided training on the processes to be followed, and that their internal processes were updated twice during the scheme, to ensure that all the right information was being captured in store. For these businesses, the income generated by the scheme justified this investment in managing it.

The three large chains interviewed reported that they had profited from participating in the scheme and felt that it had been worthwhile. The manager of one chain store described how, when the store was able to open fully, customers would browse other departments and spend money on other items while waiting for their cycle to be repaired.

*“Although, at points, the extra Fix Your Bike customers put additional pressure on our bike department during a very busy time, commercially it was very good for us... and it attracted more customers; and it provided a great solution for cyclists who needed their bike fixed. Hopefully we can do it again but with a slightly higher value of voucher, so it’s useful for electric bikes too.”*

*[Business Interviewee]*

Interviewees from the larger retailers appreciated the adaptations to the processes that EST had offered, and highlighted that, for future schemes, they would welcome early liaison with system designers, to further improve efficiency and integration with their own processes. For example, options could include a link to their cycle repair booking system in their entries in the online directory of participating businesses; or to have a chain store dashboard function, where they could see vouchers and activity from all branches. Interviewees suggested time for piloting would be beneficial. They could be open to contributing towards the cost of this as it would save staff time and lost revenue from unclaimable vouchers. Businesses would also appreciate advance notice of voucher release dates, to prepare for the increased number of customers.

## 11.6. Summary

Businesses were very positive about their involvement in the scheme. Although the survey of businesses conducted six months into the scheme indicated some issues, the biggest problem was obtaining parts, exacerbated because the scheme took place during the pandemic. Some initial problems with processing vouchers are likely to have improved as the scheme progressed. Businesses interviewed towards the end of the scheme were complimentary about the scheme and their experience of being involved. They felt that, for a large, rapidly implemented scheme, teething problems had been minimal. They would be keen to be involved in future schemes.

## 12. Conclusions

### 12.1. Overview of the evaluation

The Fix Your Bike voucher scheme offered vouchers of £50 to enable everyone in England to get a cycle repaired. Vouchers were available from July 2020 to April 2021, with final vouchers to be used by the end of October 2021 (and voucher validity periods ranging from 4-8 months).

This evaluation of the scheme has drawn on the following sources of information:

- Registration data obtained when individuals applied for a voucher, analysed for slightly under 397,000 people.
- Data obtained via an online follow-up survey of those who applied for a voucher, conducted in October 2021, with the main sample comprising 45,785 respondents.
- Qualitative interviews with voucher users and non-users, and participating businesses, with 30 interviews conducted in March 2022.
- Data from a survey of businesses registered on the scheme, conducted six months into the scheme, with 260 respondents.

### 12.2. Hearing about the scheme and applying

Word of mouth and media articles were the most common ways of learning about the scheme. Online advertisements, social media posts, official websites, money-saving websites, cycle retailers (and others in the cycling community) and the announcement of the scheme during a Government Covid-19 briefing were also important.

The scheme attracted people from all parts of England, and achieved a representative geographical coverage across regions, as well as between urban and rural areas. People from deprived areas were slightly less likely to apply. Only a third of voucher applicants (34%) were female, reflecting the pattern that women cycle less than men. People aged 25-54, white people, those in employment, car owners, and those on higher incomes were more likely to apply, compared to the population as a whole. Over a third of applicants said that they had not been regular cyclists 12 months prior to applying for a voucher. Almost eight out of 10 (79%) stated that they had cycles that had mechanical issues or were unusable.

Over 60% of people reported having paid for cycle repairs or servicing in the past. This was closely related to whether they already cycled regularly, and not closely related to whether they went on to use their voucher.

Over 70% of people found the voucher application process easy or very easy. The proportion of those who reported finding the process difficult was higher amongst those who did not go on to use a voucher. However, the qualitative interviews suggest issues such as booking in a bike or agreeing a price were more significant issues for non-users than the initial application process.

### 12.3. Using a voucher

Just under half (46%) of those who applied for a voucher went on to use one. The proportion of applicants using their vouchers was higher for older age groups (59% of applicants aged 65 or over used their voucher) and people living in least-deprived areas (51% of applicants living in the least-deprived areas used their voucher).

The likelihood that a person used a voucher was also higher for people who were not cycling regularly at the time of applying, who wanted to use their cycle for 'general use' (as opposed to exercise or daily commuting) and who had a cycle that was functional but with some mechanical issues.

The scheme was very popular amongst those who used their vouchers, with 98% saying they would recommend it. Assessments of the ease of redeeming vouchers and of the experience with the service provider were generally very positive. A substantial majority (83%) of beneficiaries felt they were charged a fair price for work done, and this proportion was higher (91%) amongst those who had a prior sense of what the work should cost.

Amongst those who did not use their vouchers, the primary reasons given were running out of time, a lack of capacity at their chosen service provider, and the repair costing too much. Qualitative interviews suggested a lack of confidence in using a voucher or visiting an unknown cycle shop, together with concerns about exactly what the voucher covered, may also have been factors for some people.

Only 29% of voucher users reported that they would have been likely to get the work done anyway, without a voucher. Only 30% of voucher non-users had paid to have any work done on their cycle since applying for a voucher. In combination, these findings suggest that most of the work that the vouchers funded was additional to what would have occurred anyway.

### 12.4. Impacts on cycling levels

To understand the effects of the scheme on cycling levels, the behaviour of voucher users was compared with that of non-users, treating the latter group as a 'control' for what would have happened without the scheme.

Twelve months before applying for a voucher, and also at the time of applying, on average, voucher users cycled slightly *less* than non-users.

In the follow-up survey, voucher users reported cycling *more* than non-users. This was apparent from responses to several questions:

- At follow-up, 73% of voucher users were cycling at least once a week – compared to 56% of non-users.
- In the seven days before the follow-up survey, 64% of voucher users had cycled – compared to 47% of non-users.
- 66% of voucher users reported that, since applying for a voucher, there had been a period of time when they had cycled more than they did when applying – compared to 33% of non-users.

- 57% of voucher users reported they were cycling more at the time of the follow-up survey than when they applied for a voucher – compared to 24% of non-users.
- 24% of voucher non-users reported that they were cycling less at the time of the follow-up survey than when they applied for a voucher – compared to 7% of voucher users.

Differences in reported cycling behaviour were particularly marked for those who were occasional cyclists (cycling less than once a week) at the time of applying for a voucher.

Comparing average cycle trip numbers for all voucher users and non-users in the seven days before the follow-up survey, there was a statistically significant difference of 0.9 cycle trips per person per week (3.6 compared to 2.8 trips per person per week respectively).

Analysis of two measures of ‘positive’ cycling behaviour by time period since voucher use suggested that increases in cycling were largely sustained over time (i.e. up to 16 months since voucher use). Analysis of seasonality and traffic levels at the time of voucher use showed that these had little effect on reported cycling behaviour at follow-up.

Those who reported that they were cycling more at follow-up were asked why (with multiple choices possible). The most common reason chosen by voucher users was the repairs/servicing funded by vouchers (71% of voucher users). Both voucher users (11%) and non-users (38%) also credited other cycle improvements (including non-voucher repairs or getting a different cycle) as a reason they were cycling more.

Amongst those who were cycling less, 40% of voucher non-users cited bike problems as a reason, compared to only 9% of voucher users. This suggests that the scheme substantially improved the roadworthiness of participants’ cycles.

In considering the plausibility that voucher use led to greater levels of cycling, it should be remembered that the vouchers did not need to be the *sole cause* of change. Instead, the qualitative interviews suggested that they were often a catalyst or enabling factor for change that was happening for multiple reasons. For example, persuading people to finally get round to getting their cycle repaired (even if they had been meaning to do so for a while); giving them a reason to think about cycling at a particular point in time; overcoming reticence to contacting an unfamiliar cycle shop; providing financial means that might otherwise have been lacking, etc.

## 12.5. Other impacts

### Journey purposes

Voucher users and non-users used their cycles for similar journey purposes at the time of applying for a voucher. After their cycle was repaired, voucher users were using their cycles for more journey purposes, especially for visits to friends and family, or for social and leisure trips.



## Cycling experience

More than eight in ten voucher users considered that the repair or service had made their cycle safer (87%) and made riding it more enjoyable (83%). For 70%, the repair had increased their confidence about cycling; and for 60% the process had identified issues with their cycle that they had not been aware of.

## Car use

When applying, nearly four in ten (39%) people anticipated that once their cycle was repaired, they would use it for trips previously made by car. In the follow-up survey, 53% of voucher users reported that they had started cycling for some trips previously made by car or van, compared to 27% of non-users. Voucher users also reported that, in the previous week, they had cycled for an average of 8.9 miles that they would previously have driven. The equivalent distance reported by voucher non-users was 7.0 miles – a statistically significant difference of 1.9 miles.

## Physical activity

At the time of the follow-up survey, voucher users were more active than voucher non-users. 56% reported meeting Government guidelines for physical activity, compared with 51% of voucher non-users. Nearly three-quarters (73%) of voucher users reported that cycling was making more than a 'minor' contribution to their overall physical activity, compared with 53% of voucher non-users.

## Likelihood of maintaining cycles in the future

The survey data did not indicate that the scheme fostered a culture of servicing/repair, since only 24% of voucher users had paid for repairs or servicing since using their voucher, and nearly four-fifths of these people had a history of doing so. However, the interviews did suggest that the scheme made some voucher users more likely to consider having their cycle serviced again, and that some voucher non-users had become more aware of cycle maintenance issues.

## 12.6. Views of businesses

Businesses were very positive about their involvement in the scheme. Although the survey of businesses conducted six months into the scheme indicated some issues, the biggest problem was obtaining parts, not least because the scheme took place during the pandemic. Some initial problems with processing vouchers are likely to have improved as the scheme progressed. Businesses interviewed towards the end of the scheme were complimentary about their experience of being involved. They felt that, for a large, rapidly implemented scheme, teething problems had been minimal. They would be keen to be involved in future schemes.



## 12.7. Lessons learnt

The findings from the evaluation offer some general lessons for future delivery of cycle initiatives (with more specific suggestions listed in Appendix D).

Participation in the scheme could be encouraged by providing vouchers on a rolling basis and enabling unused vouchers to be reallocated.

It is important that terms and conditions explain clearly whether vouchers can be used for servicing (as well as repair), and that businesses are fully aware of any requirements before participating.

A £50 voucher valid for three months was sufficient for most people. However, business interviewees also suggested that higher value vouchers might be suitable for those with specialist cycles (such as e-cycles). Both businesses and voucher users suggested that it might be appropriate to allow vouchers to be used for cycle safety equipment or towards the cost of a replacement cycle.

Targeted marketing might help to increase the participation of under-represented socio-demographic groups, such as those living in more deprived areas.

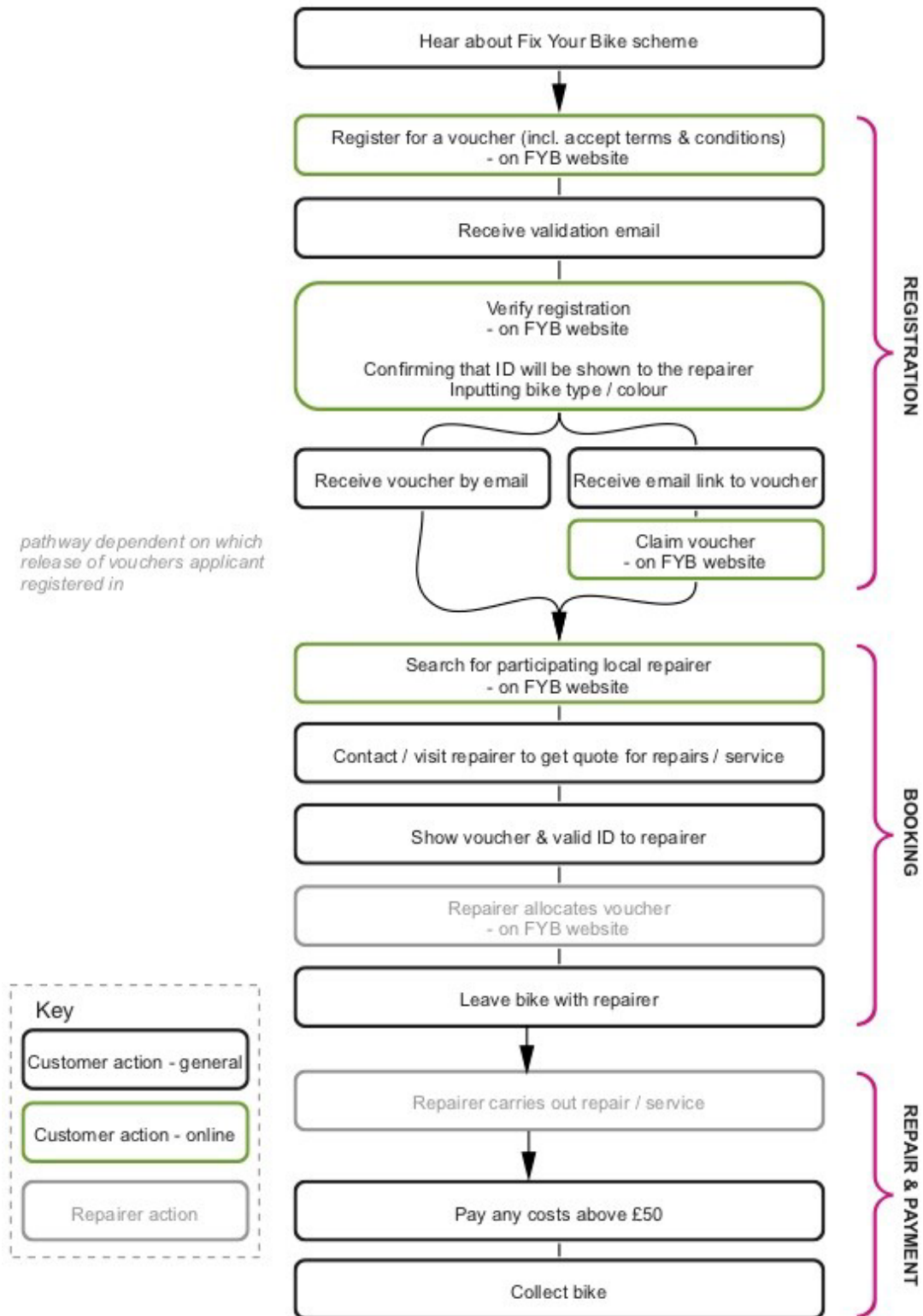
Prior engagement with the cycle industry (including large retailers) would provide time for businesses to sign up to any scheme and to pre-order stock and plan staff resources to cope with increased demand. It is beneficial for voucher users to be able to choose from a range of different types of cycle repairers (e.g. large retailers, smaller and specialist cycle shops, mobile cycle mechanics).

At the time of applying, it would be beneficial for voucher applicants to be given information about typical costs of different types of repair and service, so that they have realistic expectations of what the voucher will cover. Information should also be provided to voucher applicants about how each repairer will deal with work covered by the scheme. For example, whether they will carry out a full bike assessment and quote for all repairs they consider necessary as one package; or whether they are able to carry out smaller repairs.

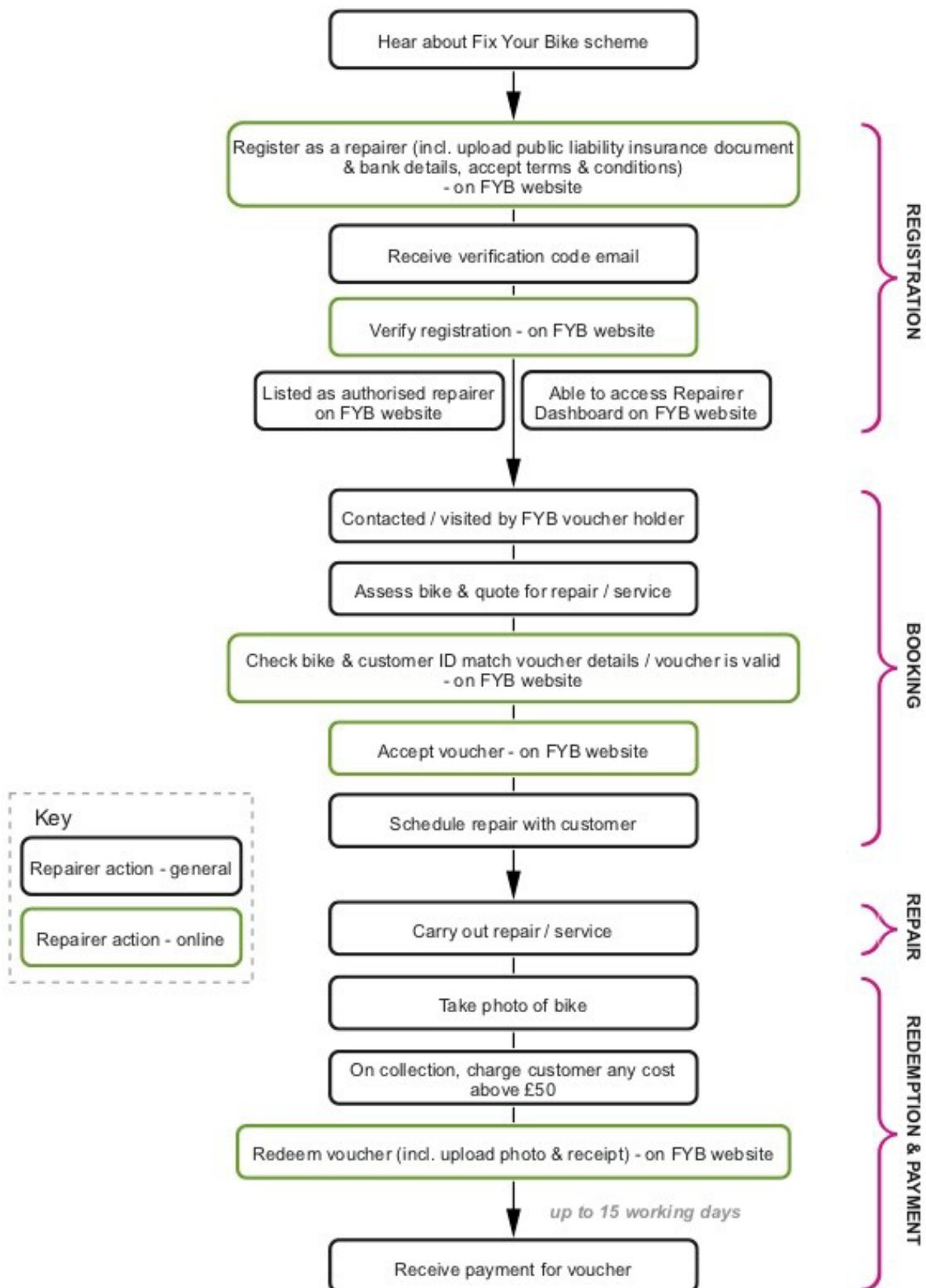
The high levels of satisfaction with the scheme, and the impacts reported, suggest that it was a popular and effective way of increasing cycling and reducing car use.

# Appendix A: Customer and business processes

Figure 25: Customer process



**Figure 26: Business process**



## Appendix B: Follow-up survey

### B.1 Survey process

The follow-up survey was created using the online tool SmartSurvey. Requests to complete it were sent to e-mail addresses from the registration database. The emails included the date when the recipient had been issued with a voucher, and a personalised survey link, to reduce the chance of the survey request appearing to be spam.

The survey was sent out as three variants:

1. Pilot survey
2. Pre-launch survey
3. Final survey

Summary statistics for the three surveys are shown in Table 4.

The survey contained 48 closed questions, although respondents took different routes through the survey and did not answer all 48. There were no open questions in the final survey, but open questions were used to gather information in the pilot and pre-launch surveys. However, some questions had an 'other' response option, in which respondents could provide more detail.

Approximately 45% of those registering stated, at registration, that they did not want to be contacted for further research, and a further group of about 20,000 people did not confirm their e-mail address or did not have an associated voucher issue date, so were excluded from the sample. In total, therefore, the survey was sent to a sample of 195,855 people, with emails successfully delivered to 184,659 people.

To encourage participation, survey recipients were told that the research would help the DfT to understand people's experience of receiving Fix Your Bike vouchers, and to design future schemes to support cycling. They were invited to take part in a prize draw to win one of five £100 vouchers that could be spent at a range of retailers.

Web pages on the University of Westminster website were created to give details of the study, the terms and conditions of the prize draw, and the privacy notice for the project, to provide assurance that the survey was genuine. EST added text about the survey to their website's information about the Fix Your Bike scheme.

Before sending out the pilot survey, the registration information was analysed. This showed spikes associated with voucher issue dates corresponding to the weeks of 29<sup>th</sup> July 2020; 11<sup>th</sup> November 2020; 6<sup>th</sup> March 2021 and 26<sup>th</sup> March 2021. It also revealed that, while most people had received one voucher, over 8,000 people had received more than one. For the pilot survey, the sample was filtered to remove those who received multiple vouchers, and then the first 500 people from each 'spike' were selected, with people sorted by issue date and then surname.

After running the pilot survey, a number of questions were changed. Some open questions were removed, and others replaced with closed questions.<sup>32</sup> Changes between the pre-launch survey and the final survey were minimal.

Throughout the process, the time taken to complete the survey was assessed, based on actual responses. This clarified that most respondents completed the survey within 5-10 minutes, and so this was used as guidance text in the e-mail.

Responses were received from 46,276 people, which represented 25% percent of those to whom an invitation e-mail was successfully delivered. Most respondents (35,128) said they were prepared to be contacted about further research in future.

A total of 45,785 respondents from the pre-launch and final surveys form the main survey sample. This excludes pilot survey respondents and respondents who withheld their consent to participating.

A schematic representation of the structure of the final survey is shown in Figure 27.

As a result of the survey mailings, approximately 500 emails were received by the research team, relating to a range of issues, including complaints about not receiving vouchers and questions about whether more vouchers would be issued. These were dealt with through personal correspondence.

## Response bias

To minimise response bias, questions were worded neutrally to capture negative as well as positive sentiments; and key aspects of behaviour were asked about in a variety of ways. Reminder emails stated *“We would really value your feedback, even if you were unable to benefit from the scheme.”*

However, people who had used a voucher were more likely to reply than those who had not. In the main survey sample, there was data from 38,511 voucher users compared to 7,274 voucher non-users. In total, therefore, about 21% of those using a voucher form part of the main survey sample, compared with about 3% of those not using a voucher.<sup>33</sup>

Nevertheless, comments left in the pilot survey, pre-launch survey and ‘other’ survey fields, and in separate e-mail correspondence, indicate that some people were keen to reply because they were dissatisfied, for example, about the time allowed for voucher redemption, or the customer service that they had received.

## Weighting

The main focus of analysis was comparing voucher users with voucher non-users, who were treated as a control group.

Consideration was given to weighting both groups to match the voucher applicant profile using the registration data (e.g. by gender and age). However, the number of characteristics available to undertake this weighting was limited, and weighting by

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<sup>32</sup> For this reason, data from the pilot survey was not incorporated into the main analysis, although qualitative responses were helpful for main survey design.

<sup>33</sup> These response rates reflect the proportions of all of those who applied for a voucher (396,881 people) – not just those who were emailed a survey link.

only some socio-demographic characteristics had the potential to increase, rather than reduce, any bias. Investigation of the data showed that socio-demographic biases in response rates were similar for voucher users and non-users. For example, in both cases, older age groups were more likely to have responded to the survey than younger age groups. The decision was therefore made not to weight the data.

In the main text, where survey results refer to 'all scheme applicants', a simple weighting by voucher use rate has been used to account for the lower response rate from voucher non-users. Responses from voucher users and voucher non-users have been weighted using a 47:53 ratio, on the basis that 47% of all vouchers were used.<sup>34</sup>

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<sup>34</sup> Whilst 47% of vouchers were used, estimating the proportion of *people* who used a voucher was less easy. About 46% of all those who applied (including those never receiving a voucher) used one, whilst 48% of those who did receive at least one voucher then used the first voucher they received. 47% therefore seemed an appropriate value to use, given it relates to the number of vouchers, and is also a midpoint between the two estimations of people using a voucher.

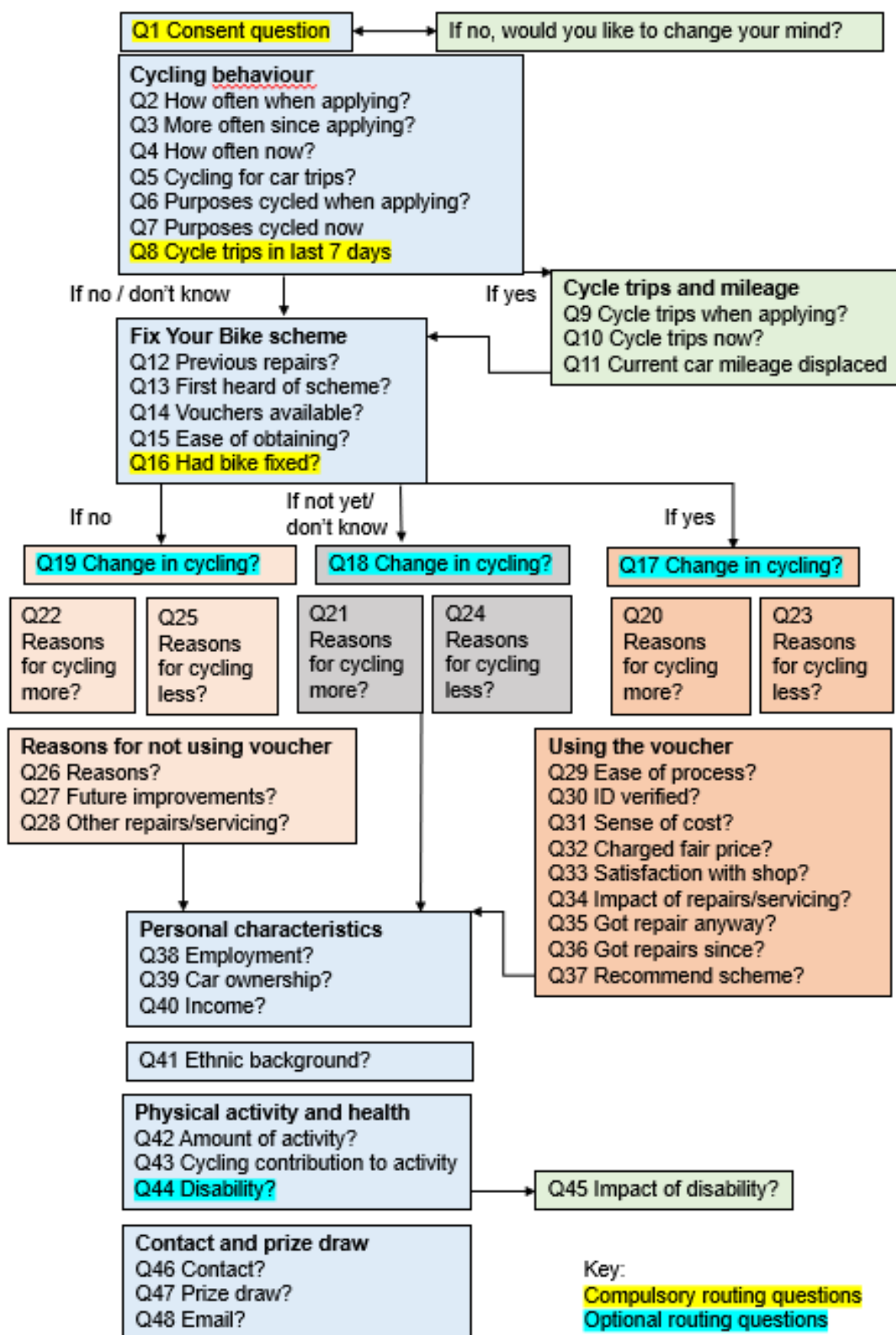
**Table 4: Key characteristics of the surveys**

	Pilot	Pre-launch	Final	Total	% of successfully delivered emails
Size of mailing	2,000	17,000 (sent in two waves of 5,000 and 12,000)	176,855	195,844	--
Date of mailing <sup>35</sup>	17/9/21	5/10/21 and 6/10/21	7/10/21 to 13/10/21	--	--
Date of reminder mailing	20/10/21	20/10/21	21/10/21 to 26/10/21	--	--
E-mail failed to deliver <sup>36</sup>	308	556	10,334	11,918	
Opened the cover e-mail	1,356	13,618	134,280	149,254	80.8%
Opened the survey link	476	5,203	47,778	53,459	28.9%
Completed the survey	414	4,539	41,323	46,276	25.1%
Partially completed the survey	55	599	5,601	6,255	3.3%
Prepared to be contacted for future research	327	3,284	31,517	35,198	19.0%

<sup>35</sup> Given the large sample size, and because SmartSurvey only sends out emails in small batches in order to reduce the risk of being classed as spam, the main mailing took place over a number of days. Sending out the survey mailing was limited to 9:00 AM to 6:00 PM, Mondays to Fridays.

<sup>36</sup> During survey mailing, a particular issue arose with one major email provider, whereby emails are throttled after an (unspecified) number. Various ways of addressing this issue were considered. However, it was possible that setting up an additional mailing list either within or external to the survey software could result in people receiving duplicate emails, which they might find unacceptable and/or that it would be impossible to keep track of whether people had replied or replied more than once.

Figure 27: Structure of the final survey





## B.2 Statistical significance and data tables

This report is supported by a set of 47 tables, in which survey results are reported for 15 different groups. For each group, a two-way Chi-square test was undertaken for the constituents of each group (e.g. the different age bands included in the 'age' group) to indicate whether there was a statistically significant difference in the responses of the different sub-groups to the question (at the 95% confidence level).

In addition, for the numerical questions on trip numbers and car mileage substitution, a two-sample t-test was conducted to ensure average responses were significantly different (at the 95% confidence level). These specific tests are indicated in the text.

It is also possible to make an approximate (conservative) assessment about whether the proportion of respondents providing a specific answer is meaningfully different between two groups, by comparing the confidence intervals that can be placed around the two values. For example, suppose that the value for one group is 20% +/- 2%, using 95% confidence intervals, while the equivalent value for another group is 25% +/- 1%, using 95% confidence intervals. Statistically, this means that we can be >95% sure that the two values are significantly different, since the two ranges do not overlap. For any large population, the key factors which determine the accuracy of results (and the confidence intervals that should be placed around them) comprise:

- The absolute sample size (which determines whether a sample is large enough to have reliably picked up the underlying variation in the population).
- The degree of variance in the answers (i.e. if everyone thinks the same, a smaller sample size is needed to get a reliable answer than if there is considerable disagreement. For example, if 90% of people favour a particular option, a smaller sample is needed than if 51% of people favour this option).

For this analysis, the range of sample sizes is known. It is therefore possible to calculate typical confidence limits, depending on the response given. Binomial confidence limits are used, given the nature of the questions asked. Example values are shown in Table 5 below. Note that, in practice, actual sample size varies for each question, depending on whether people answered it, so the intervals would be slightly different in each case. Calculating limits for every possible sample size would be a major undertaking. It is also unnecessary as, for the larger samples, limits are relatively small (i.e. where the answers for groups were different by more than 1% or 2%, the differences are statistically significant at the 95% confidence level).

**Table 5: Examples of binomial confidence intervals (symmetrical, 95%)**

Sample size	Typical of <sup>37</sup>	% of respondents selecting option		
		50%	25% or 75%	10% or 90%
38,000	Voucher users	+/-0.5%	+/-0.44%	+/-0.31%
7,000	Voucher non-users	+/-1.18%	+/-1.03%	+/-0.73%
2,500	Occasional cyclist non-users	+/-1.98%	+/-1.75%	+/-1.24%

<sup>37</sup> Actual sample sizes were 38,511 voucher users; 7,274 non-users; 2,977 occasional cyclist non-users.

## Appendix C: Interviews

For the interviews, detailed guides were developed, based on the list of topics in Table 6. Interviewees were offered a gift voucher in return for participating (£30 for businesses and £20 for voucher users / non-users), and advised that interviews would typically take 45 minutes. Prior to interviews, participant information (including consent forms and privacy notices) was supplied and written consent was obtained.

A stratified random sampling technique was used to select participants, to ensure a range of representatives were included within the sampling frame. The criteria were:

- **Businesses** – type of organisation (company; sole trader; not-for-profit); whether static or mobile; whether rural or urban; whether geographically located in the North, Midlands/East or South; and whether a major retailer or an independent store.
- **Voucher users and voucher non-users** – whether male or female; white or other-than-white; low, middle, or high income; rural or urban; located in the North, Midlands/East or South; and whether a low, middle or high frequency cyclist a year before applying for a voucher.<sup>38</sup>

The DfT provided a list of target quotas for the interviews (e.g. five males and five females, a minimum of five people whose baseline level of cycling was low, etc.). Random numbers were used to combine characteristics in the form of ‘personas’. For example, Persona C (voucher user) was female, other-than-white, low income, medium level of cycling, living in an urban setting in northern England. The set of survey respondents who had expressed willingness to participate in further research was filtered, producing a list for each persona. Contact was then attempted methodically, until an interview had been achieved. In a small number of cases, it was not possible to achieve an interview with someone having the exact characteristics of a given persona, in which case recruitment criteria were slightly relaxed. A similar process to the above was followed with repair/service providers.

**Table 6: Interview topics**

Type of Interviewee	Topics
Businesses	<ul style="list-style-type: none"> <li>• Becoming aware of the scheme and registering for it</li> <li>• Booking cycles in for repair</li> <li>• Redeeming vouchers</li> <li>• Overall process and impact</li> </ul>
Voucher users	<ul style="list-style-type: none"> <li>• Registering for the scheme and claiming a voucher</li> <li>• Booking a repair</li> <li>• Paying for a repair</li> <li>• Overall process and impact</li> </ul>
Voucher non-users	<ul style="list-style-type: none"> <li>• Registering for the scheme and claiming a voucher</li> <li>• Disengaging from the scheme</li> <li>• Overall process and impact</li> </ul>

<sup>38</sup> Those cycling two or more days a week were classified as ‘high frequency cyclists’; those cycling once a week were classified as ‘medium frequency cyclists’ and those cycling less than that were classified as ‘low frequency cyclists’. These categories were created prior to the main categories defined for this report, as given in the definitions at the beginning of the report.

## Appendix D: Ideas for improvements

A number of learning points for any future scheme were made by interviewees and during discussions with EST. These were as follows:

- Have different landing pages for businesses and customers, so that there is no confusion as to whether people are logging into the right web-page.
- Allocate the voucher to the customer, not the cycle, so that vouchers can be transferred within a household if a cycle is too expensive to repair or requires less than £50 of work.
- Have a function on the scheme website for repairers to note if/when they are oversubscribed, to avoid people wasting time trying to contact them.
- Require only one form of ID, which people would usually carry with them, as it was a problem if people forgot to bring sufficient ID.
- Remove the requirement for businesses to take a photo of the repaired cycle, as once cycle and ID were checked to allocate the voucher, a photo seemed excessive.
- If a photo of the repaired cycle is required to claim repayment, provide an app that enables a photo to be taken with a phone or tablet and uploaded directly to the scheme website.
- Ensure payments are referenced to specific voucher(s), so businesses can establish which ones are paid/resolved. As payments for Fix Your Bike were not linked to specific vouchers, businesses found it difficult to track which they had been repaid for.
- Send a briefing to participating businesses at the end of the evaluation as they would appreciate seeing the result of their participation, and this might encourage involvement in future schemes.
- Carry out light-touch assurance that the repair work that is carried out is appropriate.
- Ensure customer postcodes can only be inputted in a standard format, to facilitate processing of this data for evaluation and other purposes.
- Be aware that some e-mail providers may limit mailings to large numbers of their users as a precaution against spam. This may affect who receives emails about the award of their voucher, extended validity periods, etc., where these are sent out in large batches.
- Develop the evaluation strategy at the beginning of any scheme, including collecting more detailed baseline data to enable like-for-like comparison between 'before' and 'after' the scheme.