



Cornwall E-Cycle Pilot Evaluation Social Research Appendices

Companion report to the Cornwall E-Cycle Pilot Evaluation

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About this document

This is a companion document to the final report of the evaluation of the Cornwall e-cycle pilot project.¹

It contains:

- Appendix A – full results of the social research conducted as part of the Cornwall e-cycle pilot evaluation.
- Appendix B – information about research participants.
- Appendix C – information about data collection instruments.

¹ Shergold, I., Chatterjee, K., Pantelaki, E., Hiblin, B. & Cairns, S. (2023). *Cornwall E-Cycle Pilot Evaluation*. Report to Department for Transport.

APPENDIX A. SOCIAL RESEARCH RESULTS

Appendix A presents a full set of results from analysis of the data obtained from the questionnaire surveys and phone interviews carried out with pilot participants.

Firstly, it reports the socio-demographic and travel behaviour profiles of the Cornwall e-cycle pilot participants. Secondly, it examines why the participants were motivated to take part in each of the schemes.

Thirdly, it focuses on the e-cycle loan schemes and how the e-cycles were used during the loan periods. Fourthly, it compares cycling ownership, behaviour and perceptions before and after participation in the schemes to assess whether the interventions led to changes to these.

Finally, it considers the wider impacts of participation on the ability to access opportunities (in particular employment, education and training), physical activity levels and transport mode use.

A.1 The pilot participants

Socio-demographic profile

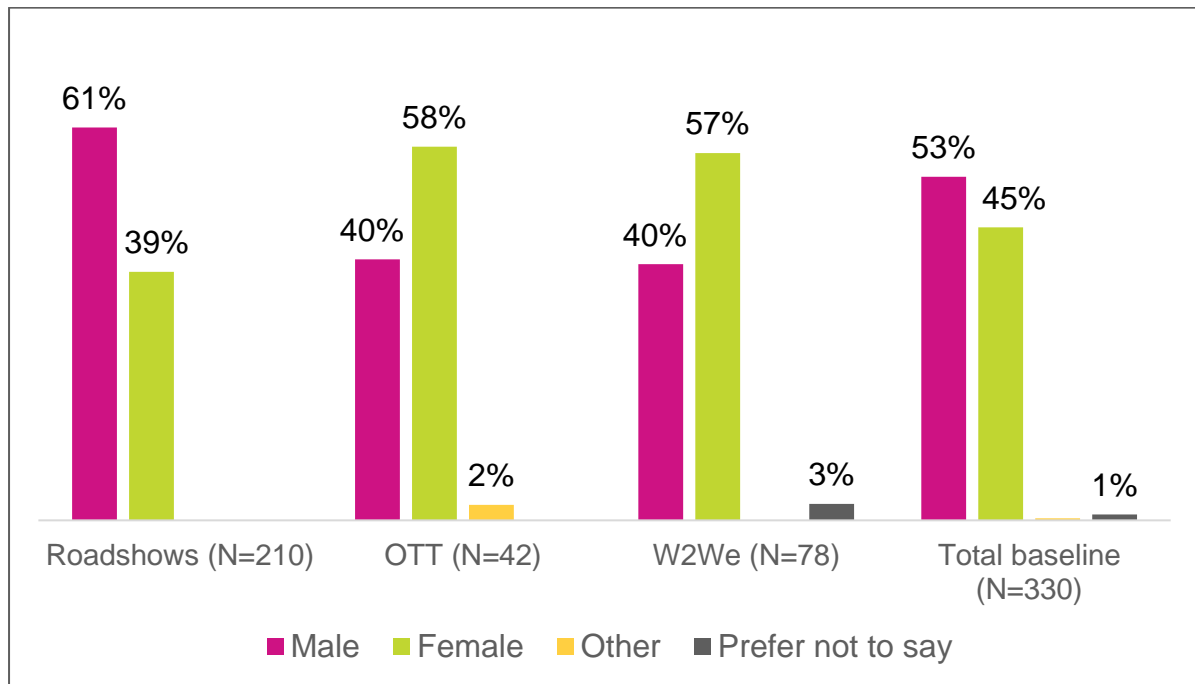
The results reported in this section are based on 333 responses received to the baseline questionnaire surveys (which represents about a third of the estimated 900 participants). The pilot participants have self-selected to try an e-cycle so have some interest in cycling or e-cycling. Those completing a questionnaire may differ from those who did not do so (although the non-response largely stems from the roadshow events where technical issues are thought to be the main cause). Respondents are likely to differ from the wider population of Cornwall in certain respects. In this section, comparisons are made with this wider population to give an indication of how pilot participants differed.

It is important to note that not all participants answered all questions and, to assist with interpretation, both absolute figures and percentage figures are reported for those that responded to a question.

Gender

Figure 1 shows an overall gender split of 53% male (176 of 330 participants) and 45% female (150), while 1% (3) responded 'other' or 'prefer not to say'.² For comparison, the gender breakdown for Cornwall is 48.5% male and 51.5% female.² There were more male responses to the roadshow survey (61%, 128 of 210) than female responses (39%), whereas the loan schemes saw more female responses (OTT 58%, 24 of 42; W2We 57%, 45 of 78) than male responses (OTT 40%; W2We 40%).

Figure 1. Gender (baseline)³



Note: The total baseline columns do not sum up to 100% because of rounding. The category 'Other' appears 0% because of rounding but the value is 0.3%.

² Gender and Age data for Cornwall: *Population and household estimates, England and Wales: Census 2021*. [Population and household estimates, England and Wales: Census 2021 - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/populationandhousehold/populationandhousehold/populationandhousehold/populationandhousehold)

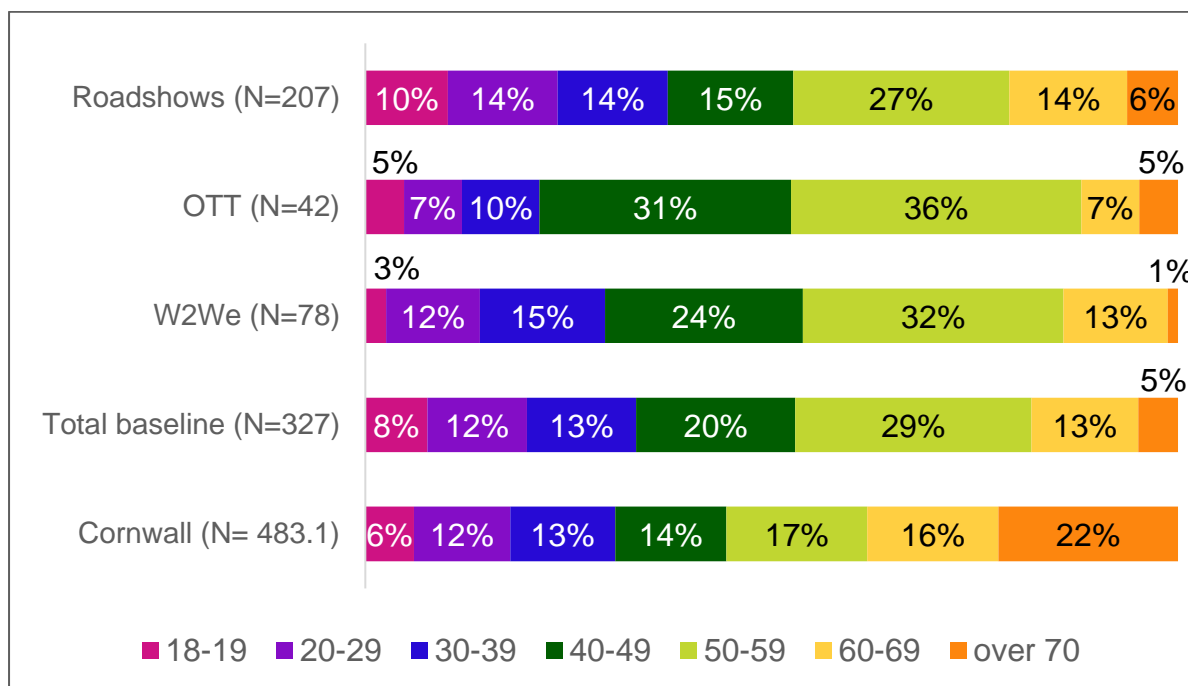
³ Baseline survey question: What best describes your gender?

Age

Figure 2 shows the largest single age-group was those in their 50s (roadshows 27%, 55 of 207; OTT 36%, 15 of 42; W2We 32%, 25 of 78). There were relatively small numbers of those aged 60 and above (roadshows 20%; OTT 12%; W2We 14%).

When comparing the age profile to the Cornwall population⁴, there was a higher proportion of participants in the 40-59 age band, lower proportion aged 70 and above and similar proportion in the 20-39 age band and 60-69 age band. The roadshows attracted a younger profile of participants than OTT and W2We with 38% under 40 years of age.

Figure 2. Age profile (baseline)⁵



Note: Total baseline N=327. The data for Cornwall is from Census 2021 and the sample size refers to thousands of people. With the Census data the lowest age category is 15-19 and is represented in Figure 2 as 18-19.

⁴ Gender and Age data for Cornwall: *Population and household estimates, England and Wales: Census 2021*. [Population and household estimates, England and Wales: Census 2021 - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk) Note: ONS data did not provide age data for age 18-19 for Cornwall as a category so is not reported here. Approximately 20% of the Cornish population is aged under 20.

⁵ Baseline survey question: Which year were you born?

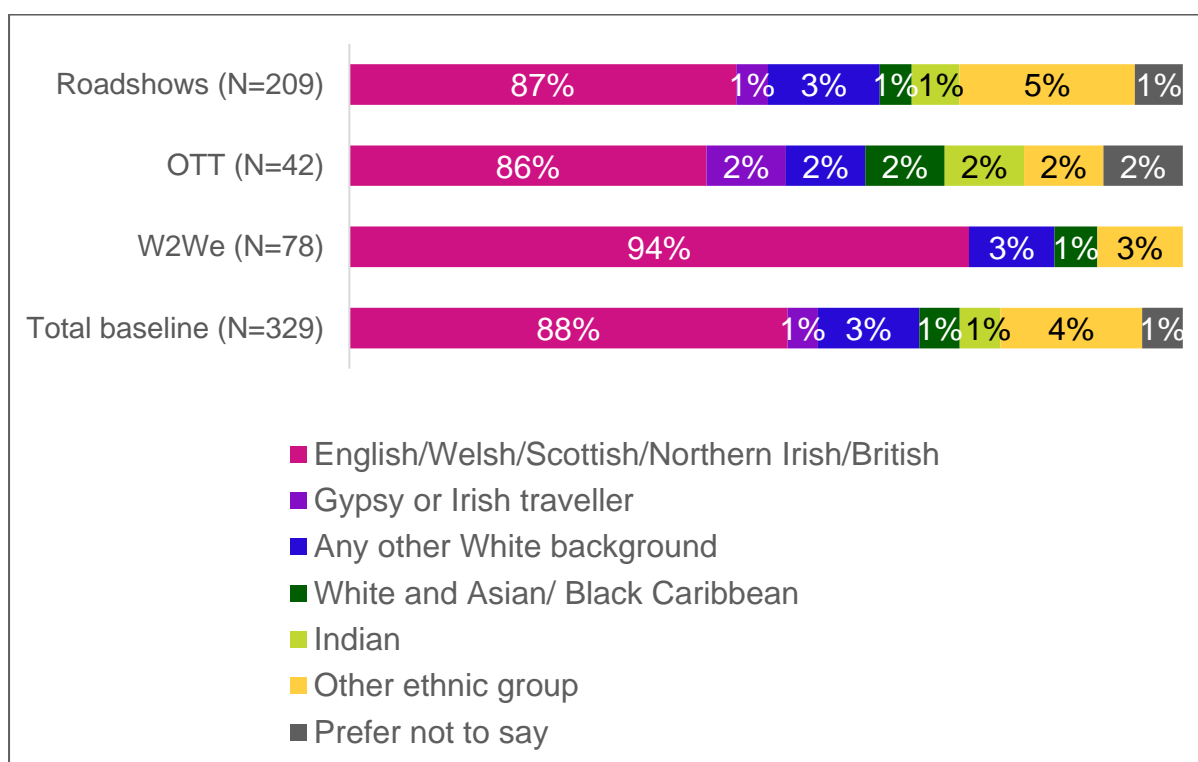
Ethnicity

Most of the baseline survey respondents identified as having white UK ethnicity (88%, 290 of 329) (see Figure 3). 1% identified as having other white ethnicity, 3% as Asian or Black ethnicity and 1% as mixed ethnicity. Over half of those who answered 'other ethnic group' indicated this to be Cornish.

In the 2021 Census, 94% of Cornwall residents identified as having white UK ethnicity, 3% as other white ethnicity, 1% as Asian or Black ethnicity, 1% as mixed ethnicity and 1% as other ethnicity, so the limited ethnic diversity of the e-cycle pilot sample is in line with this.⁶

Almost all participants stated that Cornwall was their main place of residence with 5% (15 of 329) citing elsewhere in the UK and 1% (3) that their residence was overseas, or they did not answer.

Figure 3. Ethnicity (baseline)⁷



Note: The x-axis goes from 75% to 100%. The category 'Other ethnic group' includes: any other Asian background/any other mixed/multiple ethnic background/African and any other ethnic groups.

⁶ Ethnic group results from 2021 Census are available from <https://www.nomisweb.co.uk> via TS021 - Ethnic group dataset.

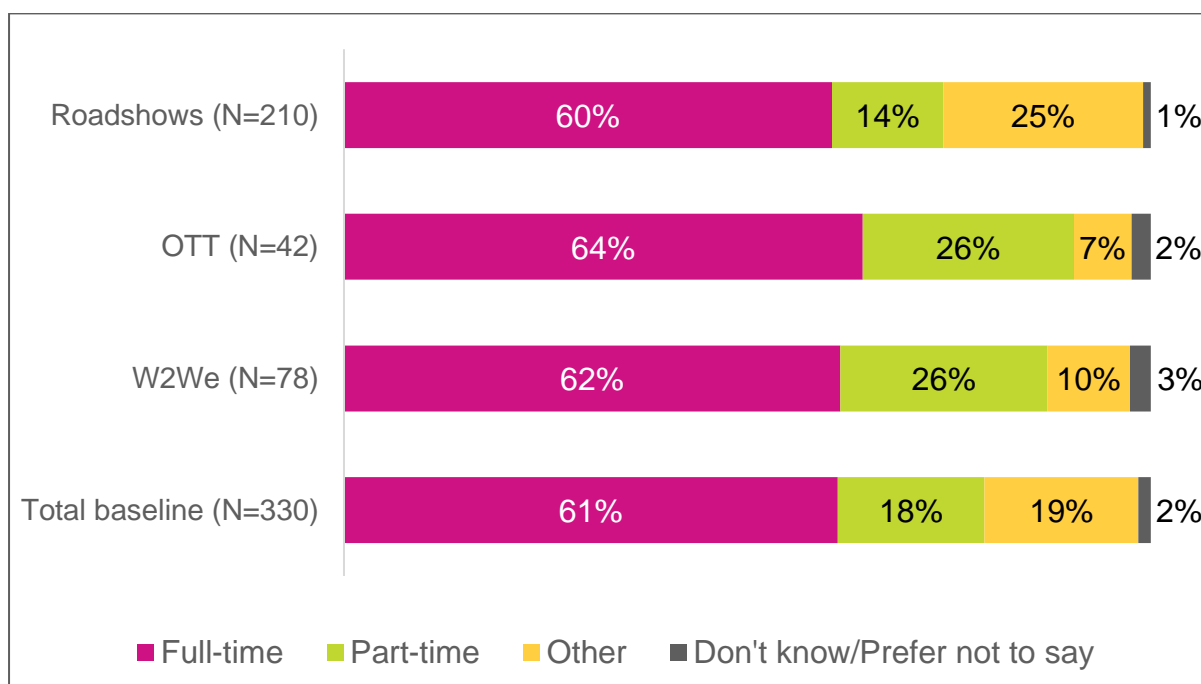
⁷ Baseline survey question: How would you describe your ethnic group?

Employment status

Figure 4 shows that 79% of baseline survey respondents were in employment (262 of 330) with 18% (59 of 330) in non-working categories (unemployed, retired, looking after the home or family, permanently sick or disabled or full-time student). Those responding that they were unemployed made up 4% (13 of 330) of pilot participants.

Statistics for Cornwall and Islands of Scilly for June 2022⁸ show that the rate of economically active people is 78.2%, a similar rate to the national UK level (78.4%). The unemployment rate for Cornwall and Islands of Scilly is 2.5%, a lower rate compared to the national UK level (3.9%). Hence the representation of unemployed, and non-working people in general, in the Cornwall e-cycle pilot was similar to that in the wider Cornwall population.

Figure 4. Employment status (baseline)⁹



Note: Category 'other' includes non-working categories (unemployed, retired, looking after the home or family, permanently sick or disabled or full-time student) and any other response which didn't match in any of the remaining categories.

⁸ Cornwall Council (2022). *Economy Monitoring Quarterly Update (EMQU) October 2022*
<https://www.cornwall.gov.uk/media/vjxd0k0w/emqu-q3-22-fin.pdf>

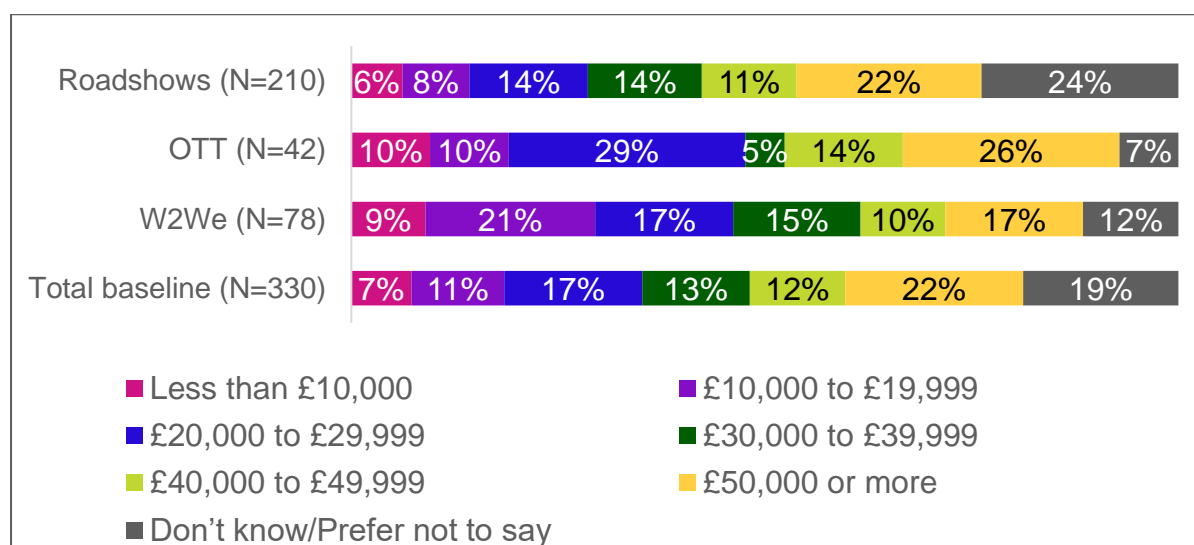
⁹ Baseline survey question: Which of the following would you say best describes your current employment status?

Household income

Median household disposable income in the UK was £32,300 in the financial year ending 2022.¹⁰ The equivalent statistic for Cornwall is not readily available, although it is known that household income in Cornwall is about 90% of the UK average.¹¹ It is estimated that the median gross household income before deductions in Cornwall is likely to be approximately £40,000.¹² Pilot participants were asked their annual household income before deductions with 59% of baseline survey respondents (who supplied a figure) reporting an annual household income of less than £40,000 with 41% reporting an income of £40,000 or more (see Figure 5). This suggests the median household income of pilot participants was slightly lower than the county in general.

The W2We loan scheme attracted the highest percentage of low-income respondents with 33% of W2We participants (23 of 69 who supplied a figure) reporting an annual household income of less than £20,000. This was 33% of those who supplied a figure. There was some targeting of the W2We scheme at people struggling with a lack of affordable transport to get to work, a training course or further education, hence this result shows it had some success in achieving this.

Figure 5. Estimated annual household income (baseline)¹³



¹⁰ Average household income in UK in financial year ending 2022.

<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/householddisposableincomeandinequality/financialyearending2022>

¹¹ Cornwall Council (2022). *Economy Monitoring Monthly Update (EMMU) November 2022*

<https://www.cornwall.gov.uk/media/2a4hz3ej/11-22-emmu-nov-2022.pdf>

¹² A gross annual income of £40,000 for a UK worker can be expected to lead to a take-home pay of £31,200 after taxes and national insurance.

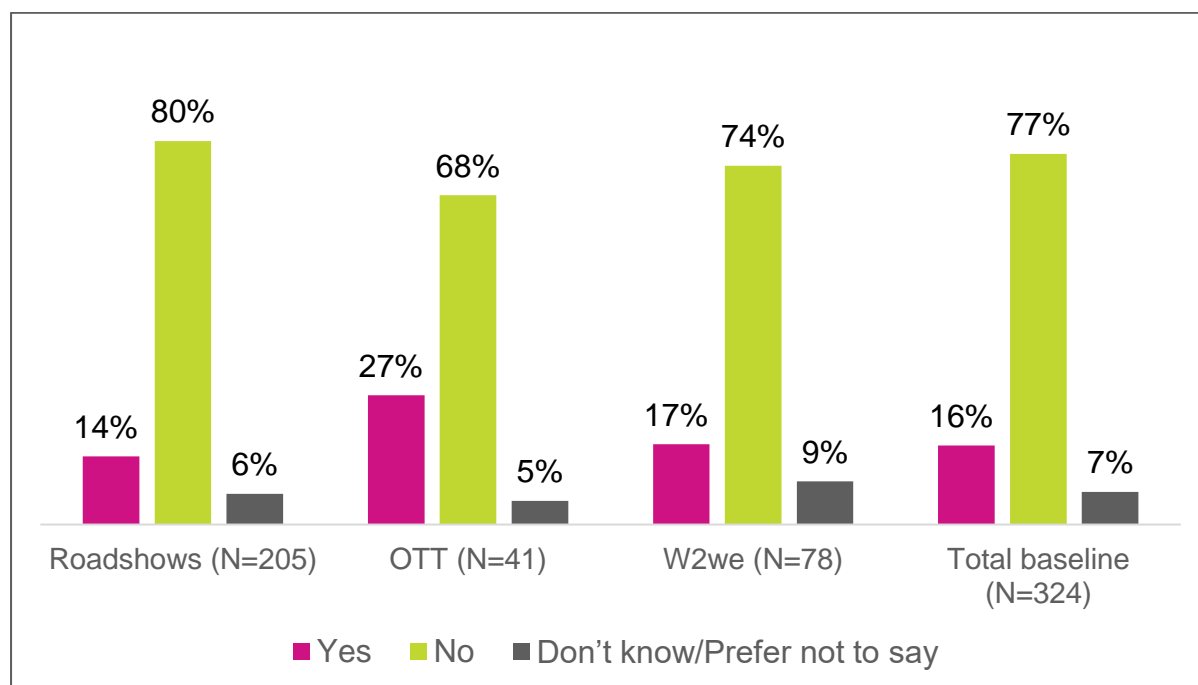
¹³ Baseline survey question: What is your household's estimated annual income? i.e. the total before deducting tax or National Insurance.

Health status

The baseline survey participants were asked about their health status. Adverse health could be a reason not to participate in the pilot but it could also be a reason to see if an e-cycle is helpful for personal mobility. Figure 6 shows that 16% of participants (53 of 324) reported having health issues (physical or mental) expected to last 12 months or more. Health issues were most common amongst OTT participants (OTT 27%, 11 of 41; W2We 17%, 13 of 78; roadshows 14%, 29 of 205).

Another study for DfT found that 36% of the population in England reported having a long-standing physical or mental impairment, illness or disability.¹⁴ While the equivalent figure for Cornwall is unknown, it is likely that representation of people with adverse health in the Cornwall e-cycle pilot was lower than in wider Cornwall. This is unsurprising given the relatively low participation of older people in the pilot but the 16% representation shows the pilot did not exclude those with health issues.

Figure 6. Physical or mental health conditions or illnesses (lasting or expected to last 12 months or more) (baseline)¹⁵



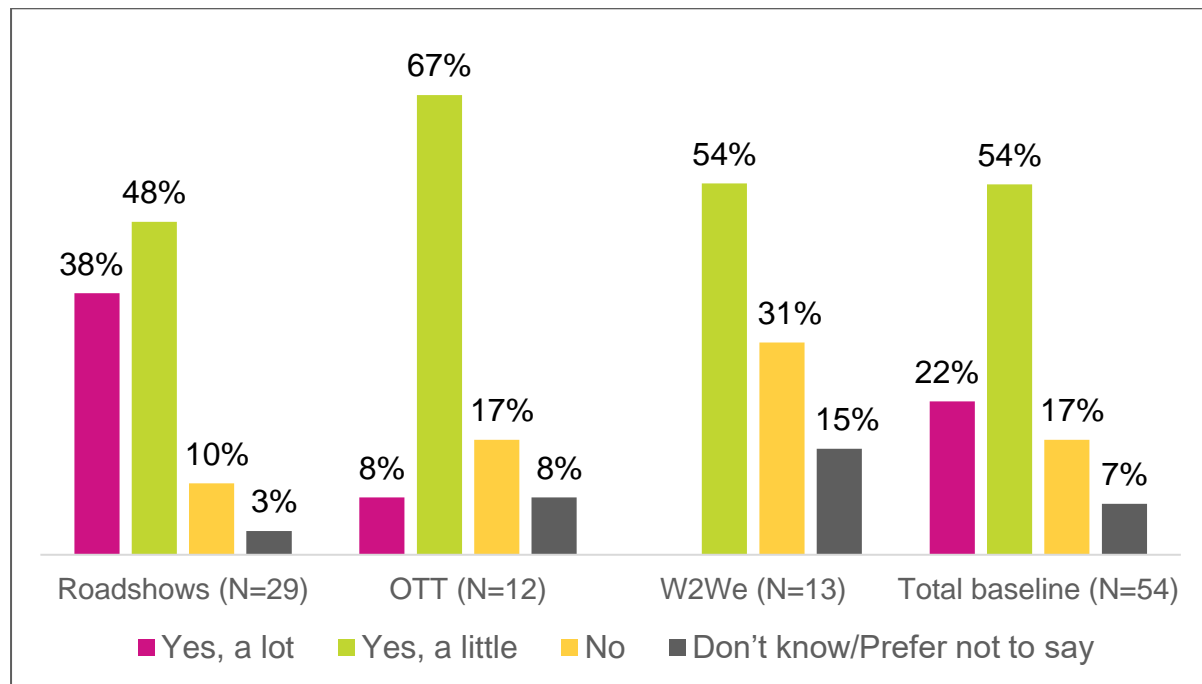
¹⁴ Chatterjee, K., Clark, B. Nguyen, A., Wishart, R., Gallop, K., Smith, N., Tipping, S. (2019) *Access to Transport and Life Opportunities*. Department for Transport.

<https://www.gov.uk/government/publications/access-to-transport-and-life-opportunities>. The specific question asked was "Do you have any long-standing physical or mental impairment, illness or disability? I mean anything that has troubled you over a period of at least 12 months or that is likely to trouble you over a period of at least 12 months".

¹⁵ Baseline survey question: Do you have any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?

For those that responded 'yes' to the question above, a follow-up question was asked whether the condition or illness reduced their ability to carry out day-to-day activities (see Figure 7). 48% of roadshow participants (11 of 29) responded that they had conditions or illnesses which reduce their ability to carry out day-to-day activities a lot. Subsequently, it emerged from the phone interviews that some participants were motivated to use an e-cycle by the desire to enhance mobility restricted by poor health conditions.

Figure 7. Conditions or illnesses reducing ability to carry out day-to-day activities (baseline)¹⁶



¹⁶ Baseline survey question: Do any of your conditions or illnesses reduce your ability to carry out day-to-day activities?

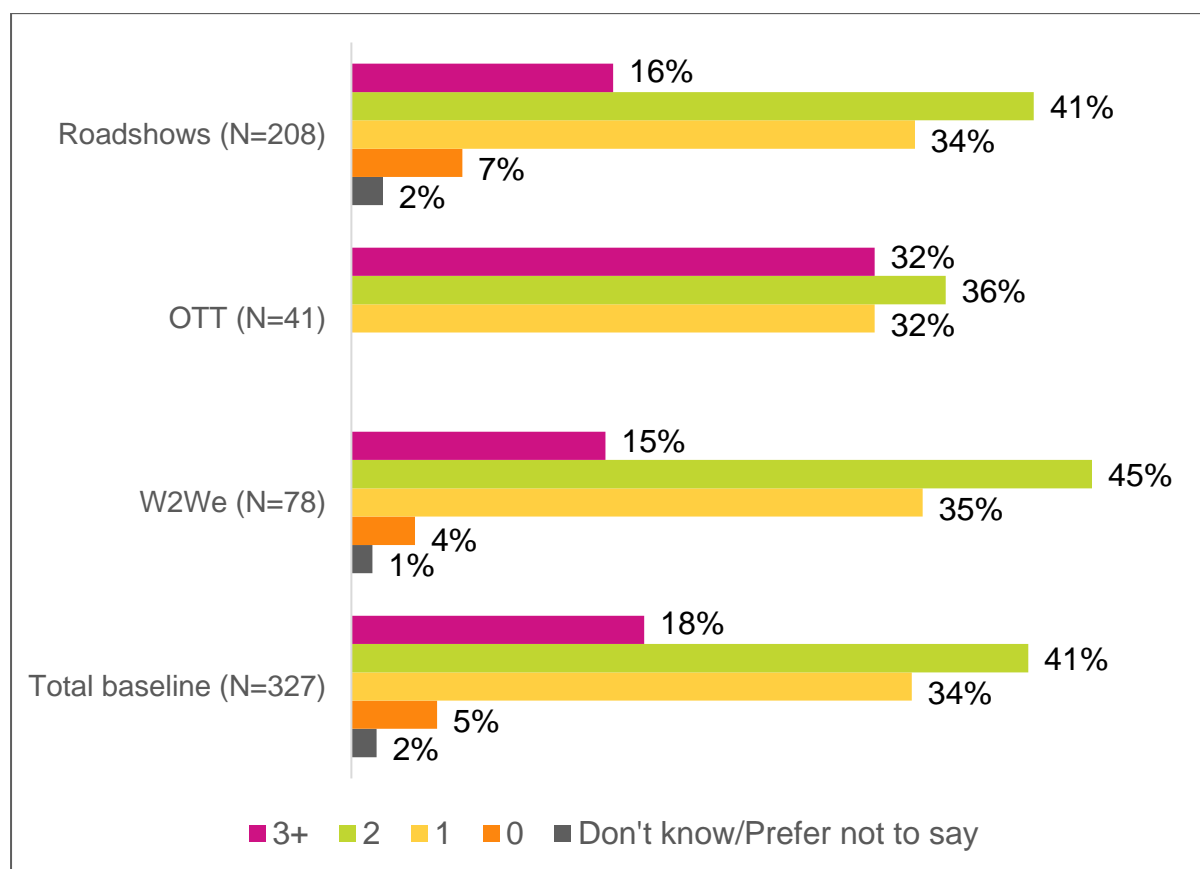
Travel behaviour profile

Household car ownership

Figure 8 illustrates that most baseline survey respondents had two or more cars/vans in their household (roadshows 57%, 119 of 208; OTT 68%, 28 of 41; W2We 60%, 47 of 78). Only 5% of pilot participants had no car or van (roadshows 7%, 14 of 208; OTT 0%, 0 of 41; W2We 4%, 3 of 78).

Car ownership is relatively high in Cornwall compared to the rest of the UK with 15.0% of households in Cornwall in the 2021 Census reporting not having a car, compared to 23.5% in England.¹⁷ Therefore, the representation of people in households without a car or van is lower amongst pilot participants than the wider Cornwall population.

Figure 8. Number of cars / vans in households (baseline)¹⁸



¹⁷ Dataset: TS045 - Car or van availability available at <https://www.nomisweb.co.uk/datasets/c2021ts045>

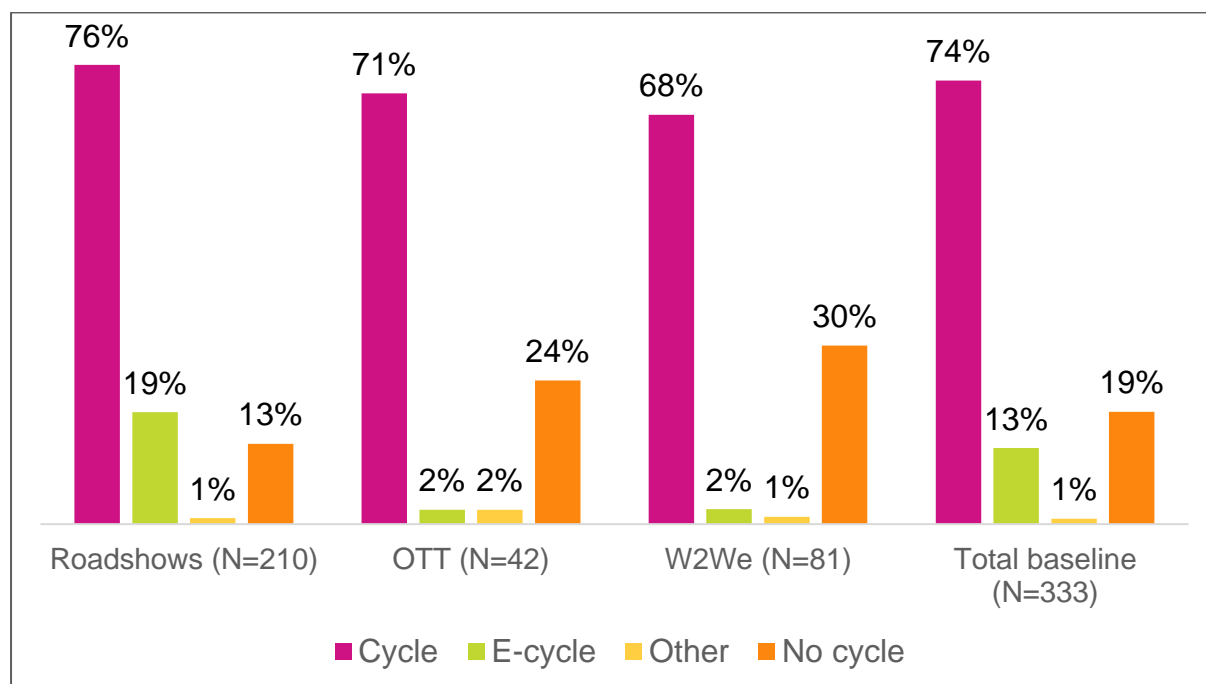
¹⁸ Baseline survey question: In total, how many cars or vans are owned, or available for use, by members of your household?

Cycle ownership

Across the three interventions, 74% (245 of 333) owned or had access to a conventional cycle (Figure 9). It is interesting to note that 19% (39 of 210) of people trying an e-cycle at roadshows already owned or had access to an e-cycle. 8% (16 of 210) reported owning or having access to both a bicycle and an e-cycle while only one participant out of 210 mentioned a bicycle, e-cycle and an adapted cycle. Existing e-cycle ownership was almost non-existent for the loan schemes (OTT 2%, 1 of 42; W2We 2%, 2 of 81). One OTT participant owned or had access to a bicycle and an e-cycle while another a bicycle and a moto cross bike. Finally, two W2We participants owned or had access to a bicycle and an e-cycle.

Meanwhile, 19% of participants (62) did not have access to any cycle – indicating the pilot was successful in engaging with non-cyclists (as also evidenced by the discussion on cycle use in the following sections). More specifically, 24% of OTT participants (10 of 42) and 30% of W2We participants (24 of 81) had no access to any type of cycle. This means the loan schemes provided them with the opportunity to have their own cycle for a period of time and see if it was a good option for them.

Figure 9. Cycle ownership (baseline)¹⁹



Note: Multiple responses allowed. For the other category, one roadshow participant identified adapted cycle, one OTT participant a cargo bike and one W2We participant a tricycle.

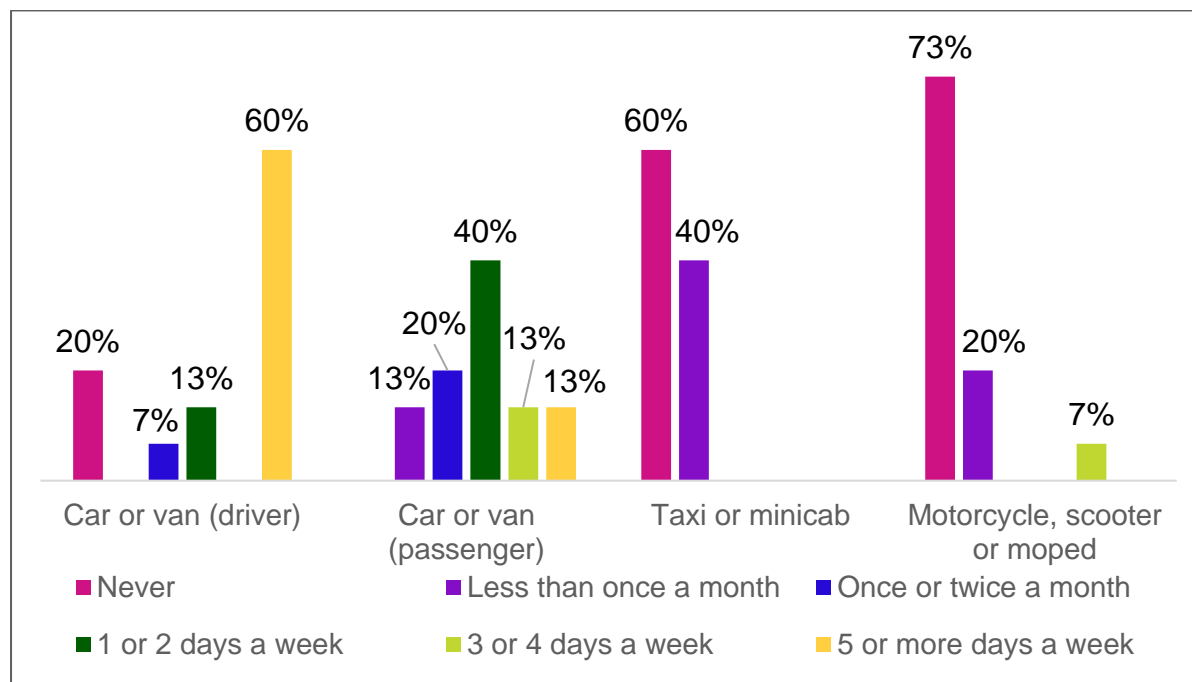
¹⁹ Baseline survey question: Do you own or have use of any of the following? This could include vehicles that you own, loan, hire or use that belong to someone else e.g. a family member or friend.

Use of different transport modes

Only participants in the loan schemes were asked in the baseline surveys to report their frequency of using different transport modes (see Figure 10-13). There was a high number of non-responses by OTT participants to this question.²⁰ Given the high car ownership levels reported above, it is not surprising that car use dominates the daily mobility of pilot participants. Three out of five OTT participants (60%, 9 of 15) used a car as a driver five or more times a week, with the figure being 51% for W2We participants (40 of 78). 13% of OTT participants (2 of 15) used a car as a passenger five or more times a week, with the figure being 10% for W2We participants (8 of 78).

Walking five or more days a week was reported by 27% of OTT participants (4 of 15) and 28% of W2We participants (22 of 78). The use of bicycles (of any type) was more limited for W2We than OTT participants. 20% of OTT participants (3 of 15) and 12% of W2We participants (9 of 78) reported using bicycles at least three or four days a week. The use of public transport was even more limited.

Figure 10. Frequency of use of personal motorised transport (OTT participants / baseline / N=15)²¹



²⁰ Out of 42 OTT participants, only 15 responded to this question as it was not a mandatory question in the baseline survey. 78 out of 81 W2We participants responded to this question.

²¹ Baseline survey question: Please answer for each mode of travel. On average, how often would you say that you currently travel using each of the following?

Figure 11. Frequency of use of public transport and active mobility (OTT participants / baseline / N=15)²²

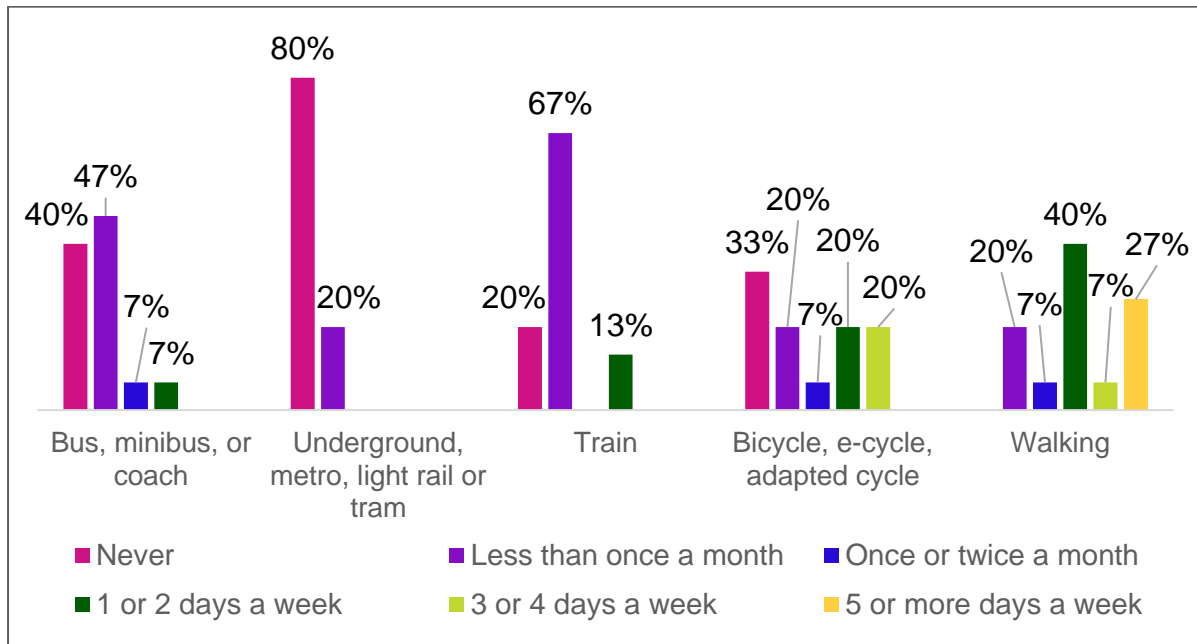
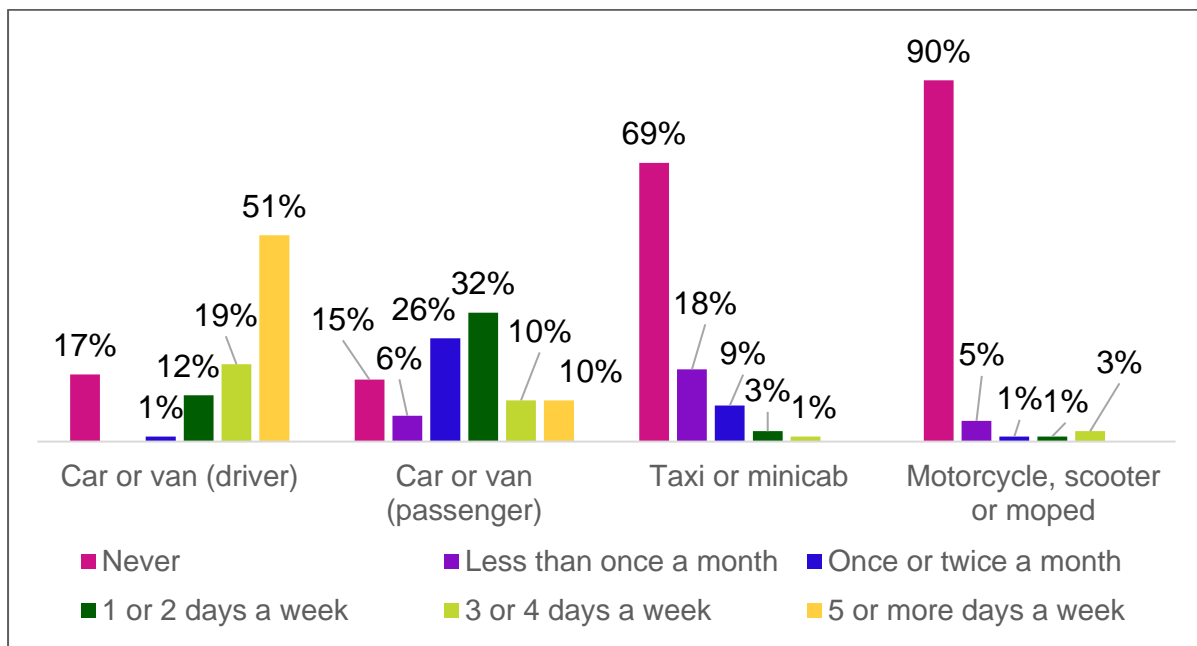


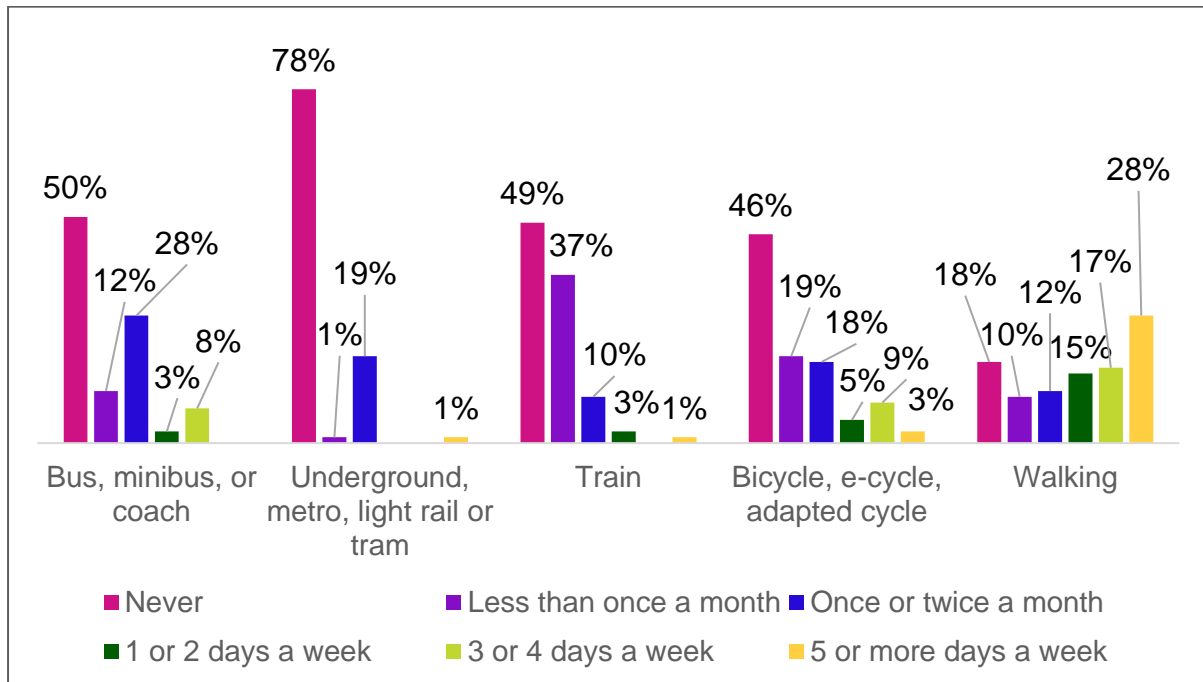
Figure 12. Frequency of use of personal motorised transport (W2We participants / baseline / N=78)²³



²² See above.

²³ See above.

Figure 13. Frequency of use of public transport and active mobility (W2We participants / baseline / N=78)²⁴



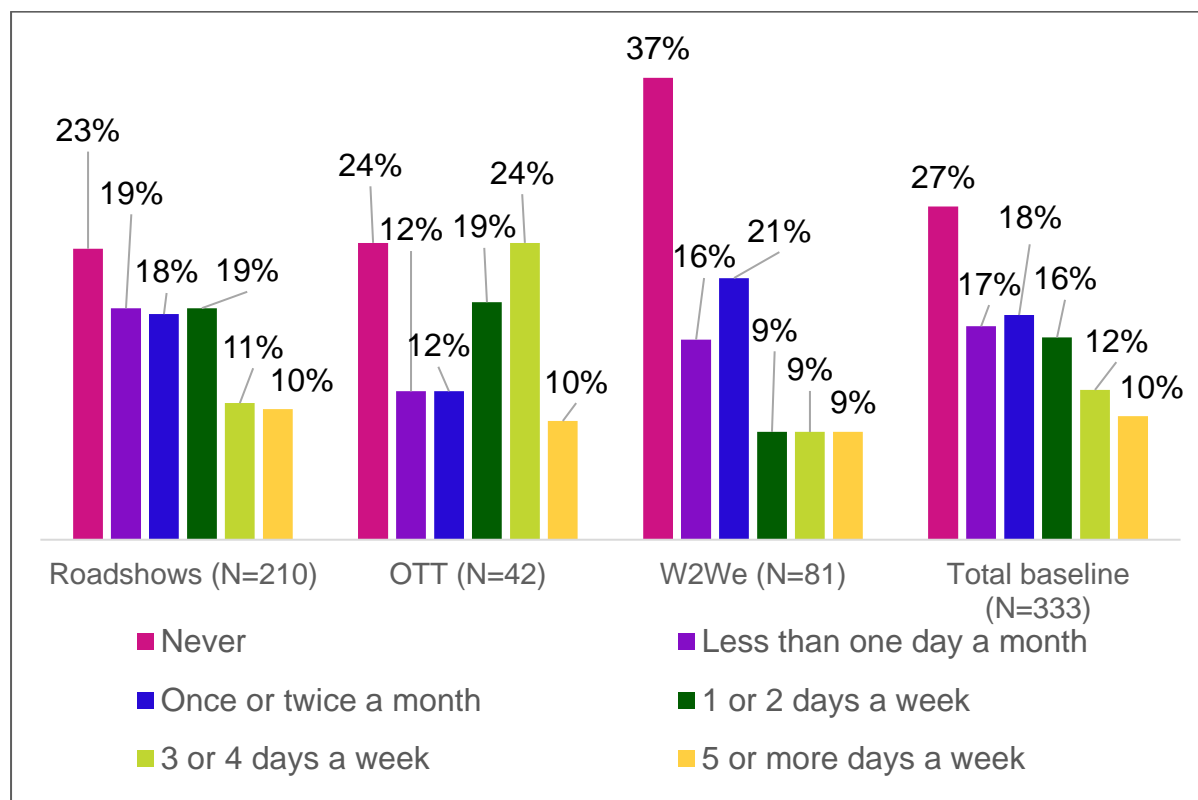
²⁴ See above.

Cycling frequency

A specific question was asked in each baseline survey about frequency of cycling (see Figure 14). Across all of the baseline sample, 38% of participants (127 of 333) reported riding at least once per week (frequent cyclists), with 10% (33 people) riding at least five days a week. 27% (89) reported never cycling, whilst 35% were people who cycled occasionally (less than once a week). In other words, over half the participants were infrequent or non-cyclists. Broken down by intervention, 40% (84 of 210) of roadshow participants reported riding at least weekly. The equivalent figure for OTT participants was 52% (22 of 42) and for W2We participants was 26% (21 of 81).

The latest data for 2020-21 from the Active Lives Survey²⁵ reports that 4.3% of people in Cornwall and Isles of Scilly cycled at least twice in the last 28 days (compared to 5.6% for England as a whole) which suggests that a higher proportion of the pilot participants are active cyclists than the population of Cornwall in general although infrequent and non-cyclists also participated.

Figure 14. Frequency of cycling activity (baseline)²⁶



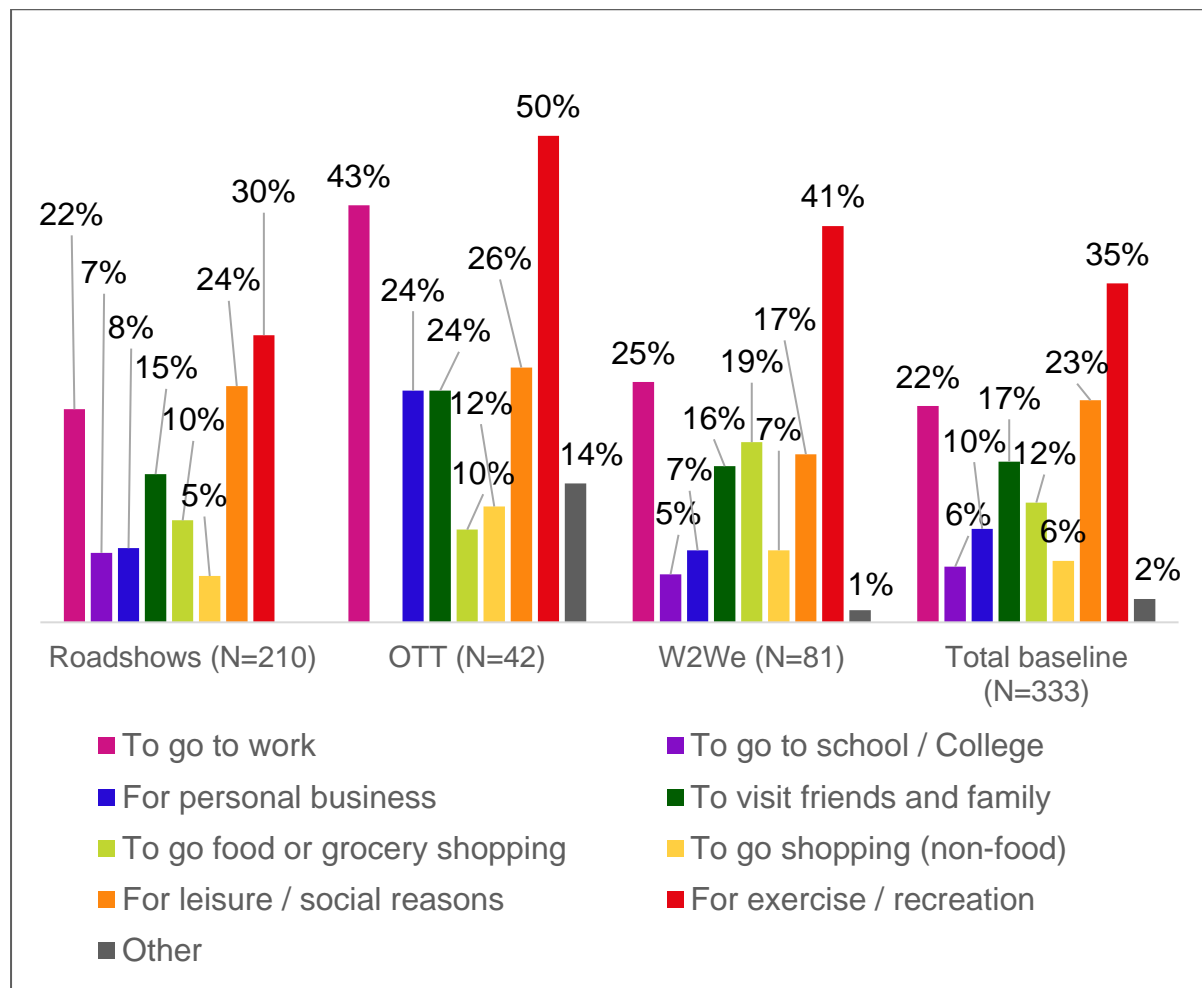
²⁵ The reported cycling activity percentages are available from Active Live Survey <https://activelives.sportengland.org/Result?queryId=83135>

²⁶ Baseline survey question: On average, how often would you say that you currently travel using a bicycle, e-cycle, adapted cycle?

Cycle journey purpose

Figure 15 shows the journey purposes for which pilot participants were cycling prior to their participation in the intervention. Exercise / recreation was the most common purpose (roadshows 30%, 62 of 210; OTT 50%, 21 of 42; W2We 41%, 33 of 81). Leisure and social journeys and getting to work were the joint second most common purposes. Leisure and social journeys were identified by 24% of roadshow participants (51 of 210), 26% of OTT participants (11 of 42) and 17% of W2We participants (14 of 81). Getting to work was identified by 22% of roadshow participants (46 of 210), 43% of OTT participants (18 of 42) and 25% of W2We participants (20 of 81).

Figure 15. Cycling trip purpose (baseline)²⁷



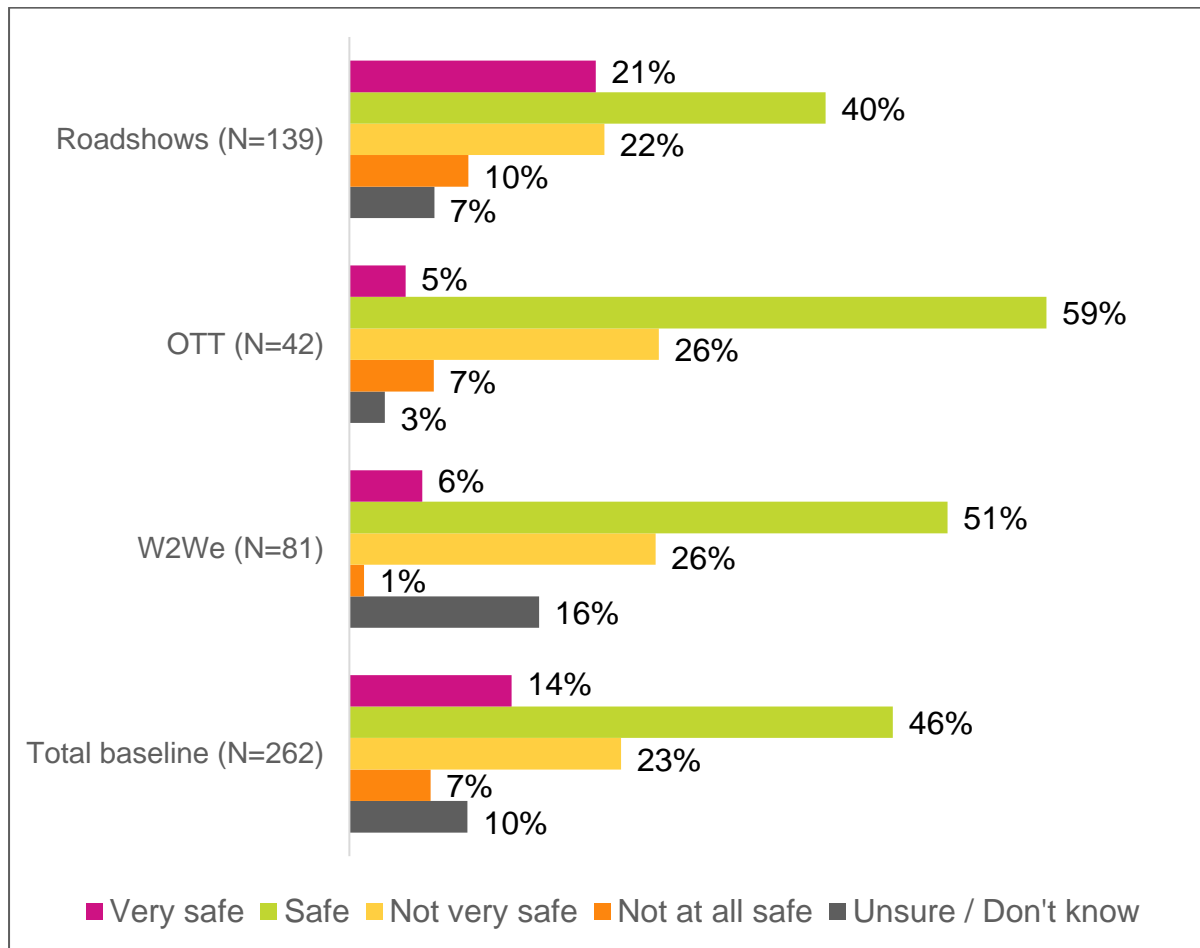
Note: Multiple responses allowed.

²⁷ Baseline survey question: Do you travel by bicycle (of any type) for any of the following reasons?

Cycling perceptions

Baseline survey respondents were asked about their cycling perceptions. Overall, 60% of baseline survey participants (158 of 262) reported feeling safe or very safe cycling on the roads of their local areas (see Figure 16). Nearly a third of all baseline participants (30%, 80 of 262) reported feeling not very safe or not at all safe. There were no major differences between the participants of the three schemes as regards feeling safe or very safe (roadshow participants 61%, 85 of 139; OTT participants 64%, 27 of 42; W2We participants 57%, 46 of 81).

Figure 16. Safety perceptions for cycling on roads (baseline)²⁸



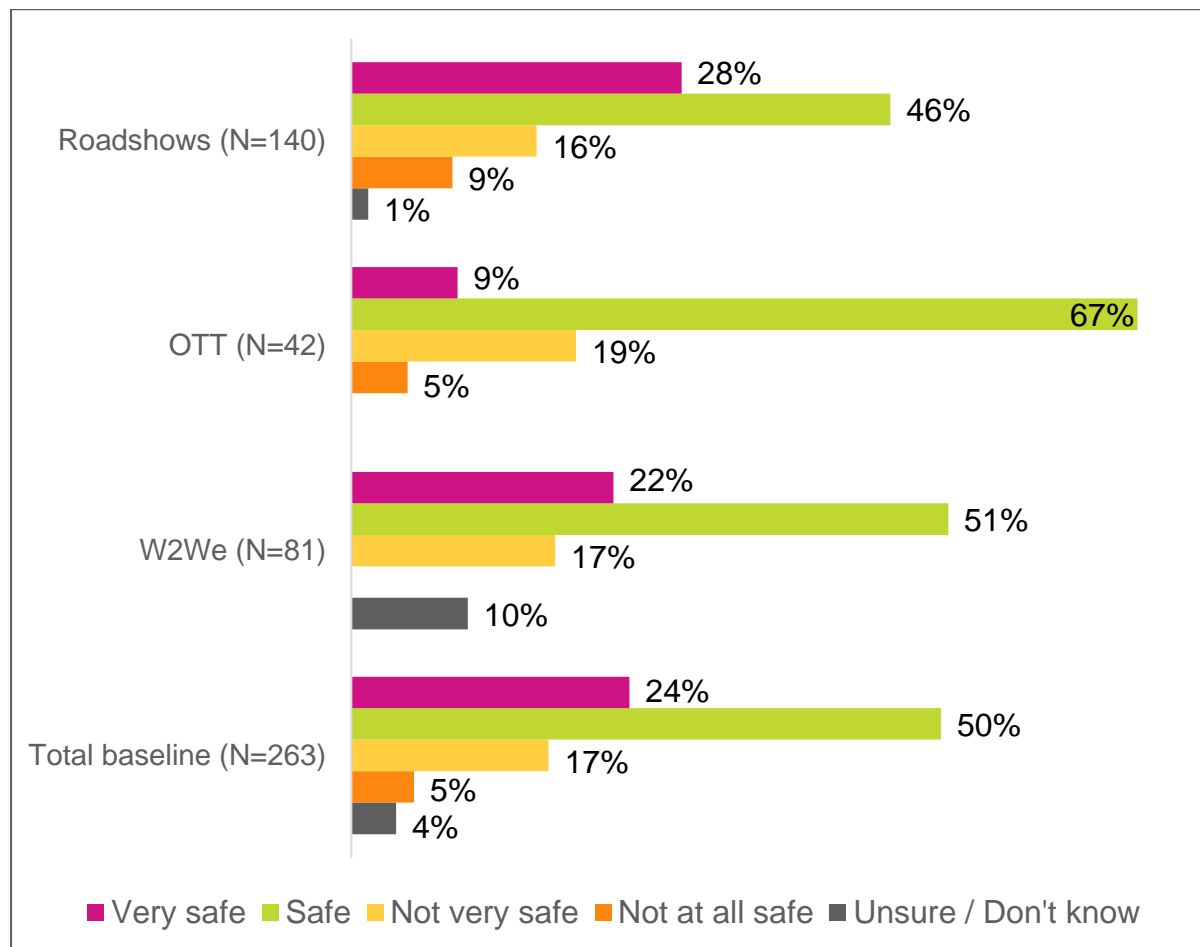
²⁸ Baseline survey question roadshows: Before today's activity/event, how safe did you feel cycling on roads in your local area?

Baseline survey question OTT and W2We: How safe did you feel cycling on roads in your local area?

As regards feelings of confidence, the results show (see Figure 17) 74% of pilot participants (195 of 263) felt confident cycling on the roads in their local areas, and 22% were not confident (58 of 263). Again, similar levels of confidence were reported by the participants of the three schemes (roadshow participants 74%, 104 of 140; OTT participants 76%, 32 of 42; W2We participants 73%, 59 of 81).

Few pilot participants were frequent cyclists prior to their participation but these results suggest most pilot participants felt safe and confident to cycle. One implication of this is that if pilot participants have a positive experience in trying an e-cycle (whether at a roadshow or as part of a loan) they are unlikely to be dissuaded by safety concerns from acquiring and using their own e-cycle.

Figure 17. Confidence levels for cycling on roads (baseline)²⁹



²⁹ Baseline survey question roadshows: Before today's activity/event, how confident did you feel about cycling on roads in your local area?

Baseline survey question OTT and W2We: How confident did you feel about cycling on roads in your local area?

A.2 Motivations to participate in the pilot interventions

Having presented the profiles of people participating in the three pilot interventions, this section looks at their motivations to participate. A question about the motivation to participate in the pilot intervention was included in each of the baseline surveys. Roadshow participants were asked about their motivation for trying an e-cycle at the event when signing up to try an e-cycle, while OTT and W2We participants were asked why they wanted to borrow an e-cycle. In each case, multiple responses were permitted for the question. To get further depth of understanding on motivations to participate in the pilot, this section also reports on what participants said about this in the phone interviews.

Roadshows

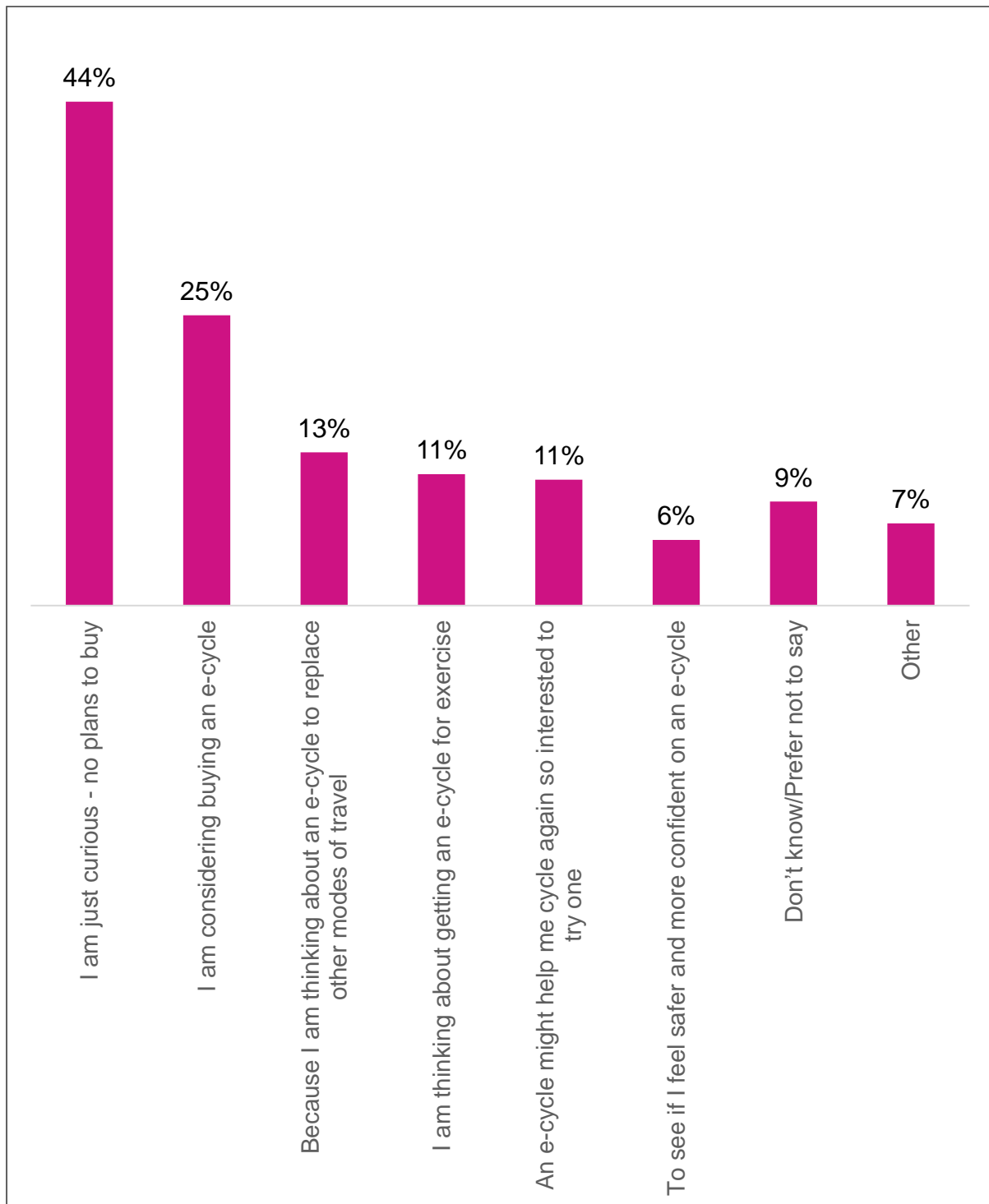
The most common motivation for roadshow participants was 'curiosity with no plans to buy an e-cycle' (44%, 92 of 210) (see Figure 18). The second most popular motivation was 'considering buying an e-cycle' (25%, 53 of 210) with many of these people also indicating 'I am thinking about getting an e-cycle for exercise'. 'Using an e-cycle to replace other modes of transport' was cited by 28 participants (13%) and 'An e-cycle might help me to cycle again' was cited by 23 participants (11%). Apart from the predefined options, 15 participants selected other motivations³⁰ and this highlighted a small number already had an e-cycle and presumably wanted to try a different model.

Loan schemes

A similar question about motivation to participate was asked of OTT and W2We loan participants before their loan started. Four question options attracted broadly similar popularity (see Figure 19): ability to make particular journeys (OTT 79%, 33 of 42; W2We 72%, 58 of 81); considering buying an e-cycle (OTT 69%, 29 of 42; W2We 65%, 53 of 81); environmental reasons (OTT 67%, 28 of 42; W2We 64%, 52 of 81); and exercise benefits reasons (OTT 64%, 27 of 42; W2We 65%, 53 of 81). The high number of responses for each of these four options suggests most loan participants had multiple reasons for taking part in the scheme.

³⁰ Other motivations included "Already have an e-cycle" (5 people), "I have knee arthritis and finding it difficult on my pedal cycle, but wish to keep the cycling", "Keep up with my husband", "Looking to buy e-bikes for our doctors and paramedics to visit patients at home" and "Want to commute by e-bike".

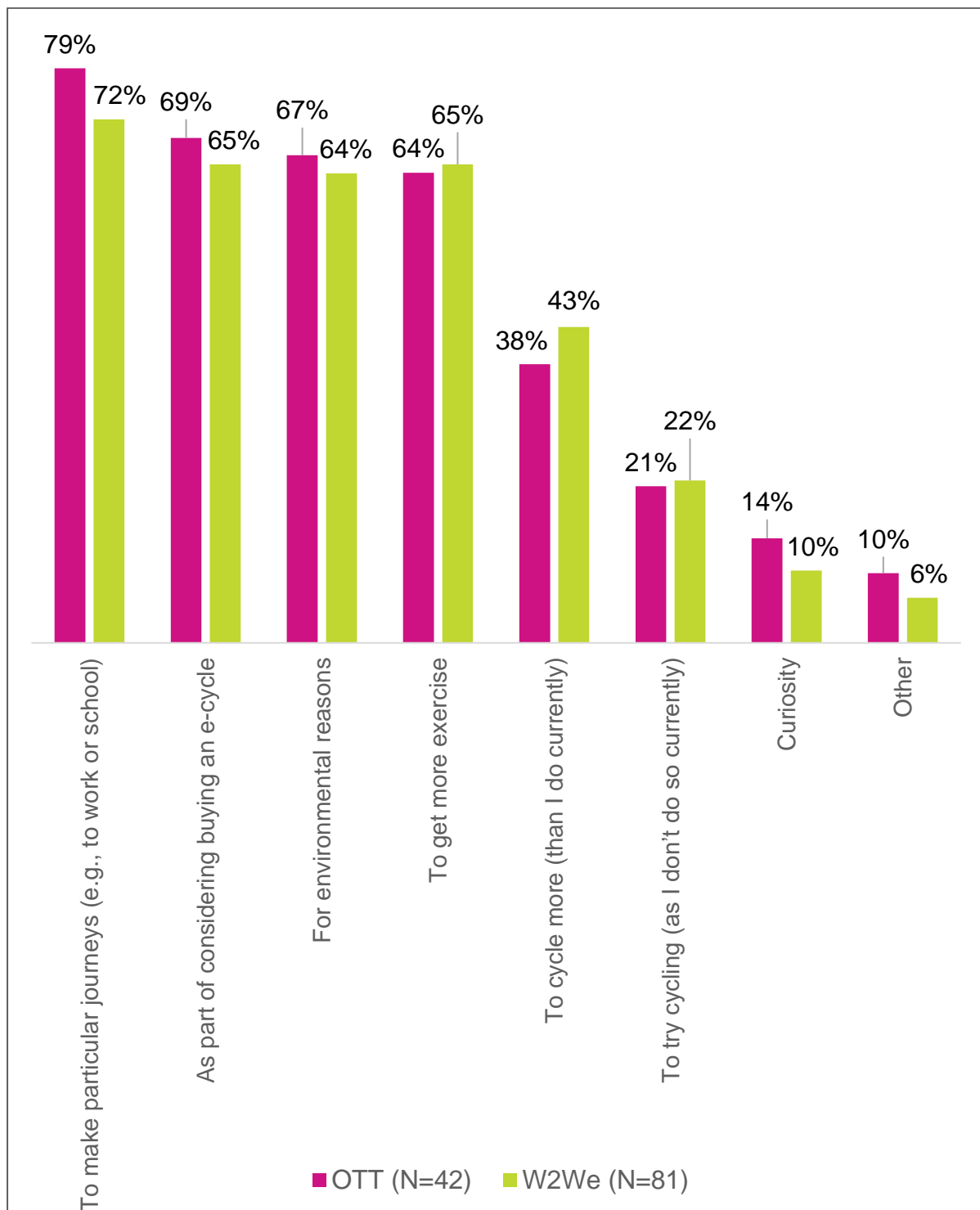
Figure 18. Motivations to try an e-cycle (roadshow participants / N=210)³¹



Note: Multiple responses allowed.

³¹ Baseline survey question: What motivated you to try out an e-cycle today?

Figure 19. Motivations to try an e-cycle (OTT and W2We participants)³²



Note: Multiple responses allowed.

³² Baseline survey question: Why were you interested in borrowing an e-cycle from the scheme?

Phone interviews – motivations to try an e-cycle

The phone interviews provided additional insights into the motivations of pilot participants. Although interviewees had particular personal motivations, there were several common themes that emerged. These are discussed below and highlight both motivations to participate in the pilot and also experiences during the pilot for those who loaned e-cycles. Section A.3 builds on this by reporting survey results for cycle use during the loan period.

Travel to work

Although interviewees mentioned wanting to use an e-cycle for different travel purposes, getting to work was prominent. Cases where this was evident are detailed below, including the case of Oliver (see [Case Study A](#)).

Emma, a roadshow participant, mentioned that prior to the roadshow event at her workplace, she usually walked to work in the town centre from her home which is on a hill, unless the weather was bad when she would drive her car. When asked if she was specifically interested in changing her commute, she said:

“Well, I saw a friend with an electric bike and I gave it a go first and I thought ‘wow they are brilliant’. Obviously you know I am getting to a stage where I cannot get up a hill without some kind of assistance. So I thought I’d give them a go and, then when you guys had the open event here to try some bikes, I was looking for a specific kind of bike, a folding bike.”

After attending the roadshow, Emma purchased a folding e-cycle which she is now using to get to work.

Rose, a roadshow participant, reported her current work journey is six miles and her employer is very supportive of cycling. Currently she cycles a couple of times a month for leisure and exercise. If she buys an e-cycle in the future, she said she will use it in place of the car for the commute and to visit friends locally. However, she did also note that there would need to be changes to the local road network to slow traffic.

In contrast, Nancy, a W2We participant, who borrowed an e-cycle for six months, expecting to use it for getting to work, found she used it to replace driving and walking for other purposes (visiting friends, shopping, leisure rides) but not for work. She highlighted concerns about the security of the e-cycle if she left it at work or in a public place, but she is actively pressing her employer to provide secure storage facilities.

Karen, an OTT participant, bought an e-cycle after returning the e-cycle from the loan scheme. She uses it for getting to work. She emphasised that cycling to work provides a separation between work and home that driving does not, as well as access to fresh air. She also noted there was no public transport alternative for her commute. When asked what was motivating her to use the e-cycle, Karen said:

“It is so nice being outside. I mean even after like a 13-hour shift, it is really nice just to get out in the fresh air, be able to come home, and you know it separates your work from your home life. You have thinking time where you

are not driving and scents of the plants as you are cycling down a country lane. It is just bliss, it really is!"

Finally, Leon, a W2We participant, who already cycled to work, registered for the loan because he could not afford to buy an e-cycle. He spoke about how the e-cycle meant he could cycle to work more often:

"I'd say for me it was used purely as a utilitarian tool for cycling to work. It meant that I could do all four of my shifts by bicycle, whereas I was just finding that was too much without the e-bike assist. 65k a day on top of a 12-hour shift with over-runs is a bit brutal."

Making cycling possible for those with health issues

Several interviewees were interested to see whether an e-cycle would help them get back to cycling or increase their cycling and overcome health constraints. William, a roadshow participant, mentioned how a back problem meant he had been interested in trying out an e-cycle.

"One of the reasons I was using my bike less and less is that I've done something to my back as well and I was finding manual cycling a bit uncomfortable, whether that is just because my bike was badly set up I'm not sure, but I've found it less uncomfortable with an electric bike."

Gabriel, a roadshow participant, had bought an e-cycle a few years ago after being recommended to do so by his surgeon to help with recovery after a double hip replacement. However, he had returned the cycle after it kept breaking down and so attended the roadshow to try the latest e-cycle models. He remained positive about the health benefits of e-cycles:

"...for injury rehabilitation for people who've may be got chronic conditions and people with mental health conditions, I think they're a real way ahead for them to change their life."

Nancy mentioned knee problems (from rheumatoid arthritis) which precluded her from conventional cycling, and but had managed to cycle three or four times a week during the six months of her W2We loan.

"The one before this one I actually bought [a] brand new, lovely bike but I got rheumatoid arthritis and I couldn't ride it. Every [time] I rode the bike, my knee blew and it would be six weeks before I would be able to even think of riding the bike again so it got left in the garage."

Nancy then heard about one of the roadshow events and *"went and tried one and it was amazing"*. She subsequently loaned an e-cycle via the W2We scheme.

It was noted previously that Karen, an OTT participant, was using a new e-cycle she had bought for getting to work. She also explained in her interview that she had knee problems which meant a conventional cycle was not appropriate for her. The loan period helped her decide whether she would use an e-cycle and what type and size to buy. She had been able to confidently purchase an e-cycle after the loan, knowing she would be able to ride it.

Saving money

A number of interviewees mentioned that riding an e-cycle could potentially save them money in terms of fuel and parking costs and avoiding the need for a second car. Ellie, an OTT participant, normally drives a pick-up truck to work and the high fuel costs motivated her to try an e-cycle. Her commute is 17 miles each way and, although she loved trying the e-cycle, she considered the 90 minutes journey each way too much and not really viable. In trying out the e-cycle for the journey, she found it enjoyable but it was clear it was not a realistic option for the future.

Elizabeth, an OTT participant, used her loan e-cycle to get to work sites instead of using her motorcycle which saved money on fuel, but the cost of buying an e-cycle meant she expected to have to return to using her motorcycle after the loan finished (see [Case Study B](#)).

When asked if she would have liked the loan to have been indefinite, Georgia, a W2We participant, said:

“If it was a low weekly cost like the hire was ... I think I would just do it because I would have ended up saving money overall on petrol for those short trips and it was a great thing to have and I wouldn’t have noticed that weekly outgoing and I would have been happy to keep it forever.”

Helping with the hills of Cornwall

Many people talked about the hills in Cornwall and how an e-cycle could help them cycle despite the terrain generally being a deterrent to this. Some interviewees had moved to Cornwall as a cyclist (from both cities and rural areas), but then reduced or stopped cycling because of the hilly terrain.

Karen, an OTT participant, explained what encouraged her to use the loan e-cycle:

“Essentially, it was like making Cornwall flat but you still get the views. So, in Cornwall you’ve got to brace yourself to get up a hill because you know it’s going to be a killer, whereas this, you can just do 15 miles an hour wherever you go. So, it’s been fantastic.”

Rose, a roadshow participant, was now considering getting an e-cycle through the Government’s Cycle to Work scheme and said the main advantage of an e-cycle would be:

“In Cornwall, there’s not massive mountains, but it’s undulating a lot the geography and I suppose that’s what would help with me, just that boost to get me up and down the hills. And ... give me enough reserves to be able to use it as a method to commute and have that reserve energy.”

Oliver and Leon, two of the W2We participants, explained that they deliberately picked routes to work that avoided main roads but involved hills. As they were doing them on e-cycles, both were comfortable with their longer, hillier journeys. Further details about Oliver are presented below in [Case Study A](#).

Case Study A: Oliver – using e-cycle for long commute

About Oliver

Oliver is in his 40s and works full-time. He has two cars/vans in the household and a household income of £40k-£49k per annum.

Experience with cycling

Oliver had been a regular cyclist earlier in his life, but rarely cycles any more even though he has a bike. He had not tried an e-cycle before the loan. He had thought about buying one but thought they were too expensive.

Motivation for W2We loan

Oliver heard about the W2We loan scheme through a friend using the scheme. He hired an e-cycle during the summer of 2022. He was keen to try it for his journey to work, which is approximately 16 miles each way.

'I'd never used an e-cycle at that point. I was obviously aware of them. I'd seen people whizzing past me and things. And this friend raved about using it to get to work. I had looked at purchasing them previously but just thought that's well outside my price range, the amount that I would use it. And then the practicalities were a bit of an unknown and one of the appealing things about being able to rent it for three months was just seeing whether it was actually practical to cycle from where I live to work.'

During the loan

Oliver used the e-cycle 3-4 days a week, exclusively for commuting. He chose a longer (safer) route to work to avoid main roads but that meant the journey time was twice that by car - up to 70 minutes. He would not take this route on a conventional cycle. The two hours exercise was seen as a positive. The e-cycle needed to be charged at work to ensure the battery lasted the return journey.

Opinion on the W2We loan scheme

Oliver thought the loan scheme was a good chance to explore the practicalities of e-cycle ownership/use. Overall, the loan was seen as a positive experience. He had the opportunity to extend the loan but declined it, as his working pattern was going to change in the autumn and he would need to carry more equipment (making his van a more suitable option).

Travel behaviour after the loan

Oliver has reverted to using a diesel van to get to work after the loan. He would be interested in renting an e-cycle in the future rather than buying one, as he felt this would allow him to have the latest technology. He felt it was not economically viable to buy an e-cycle currently unless fuel prices rose considerably. He saw safety on the roads as the biggest barrier to wider e-cycle use in Cornwall.

Case Study B: Elizabeth – saving on fuel costs

About Elizabeth

Elizabeth is in her 50s and works part-time. She has never had a car but has a motorcycle licence and has owned one for around 25 years. Her household income is £10k-£19k per annum.

Experience with cycling

Elizabeth has cycled since childhood but, prior to the loan, was cycling only occasionally for short journeys. She previously cycled to work about 7-8 miles with a flat journey but changed job and this meant an 11 mile journey up and down hills, often in strong winds. She finishes late in the day and was not keen on cycling after dark.

Motivation for OTT loan

Elizabeth was not aware of the benefits and practicalities of e-cycles prior to the loan. She knew other people who had tried them and said they were good:

“Yeah, not really very aware. Just know that everyone who's tried one and had one and said, oh, wow, this is great. Yeah, I just thought this will be a fun way to try it and see what the benefits are. Yeah, and see how it fits in with my life.”

During the loan

Elizabeth had moved from an OTT loan to W2We loan (which was continuing at the time of the interview) and was using the e-cycle instead of her motorcycle for a wide range of journey purposes. She has different work sites, including one 6-7 miles away, for which she used the e-cycle. She also used it to get to the railway station for onward travel for work. She said *“it was a sort of environmental thing, a bit of a price thing as well”*, noting that the e-cycle helped save on fuel and ticket costs.

Opinion on the OTT loan scheme

Elizabeth has recommended the loan schemes to lots of people and notes that several friends have also bought e-cycles recently.

Travel behaviour after the loan

Elizabeth was planning on returning to her motorcycle at the end of the loan, whilst thinking about how to afford an e-cycle. She sees the main benefits as health and saving money from not buying fuel. She thinks they are a good solution for people like her in Cornwall:

“From talking to friends and from experiencing them myself, I think they've got a more positive impact in rural areas anyway, because in towns it's very stop start, which doesn't suit e-cycles as much. You know, just getting on an open road and being able to ride, which is what we have in the rural areas. And the longer distances to get to places that the bike then makes it accessible as something that you will just cycle to.”

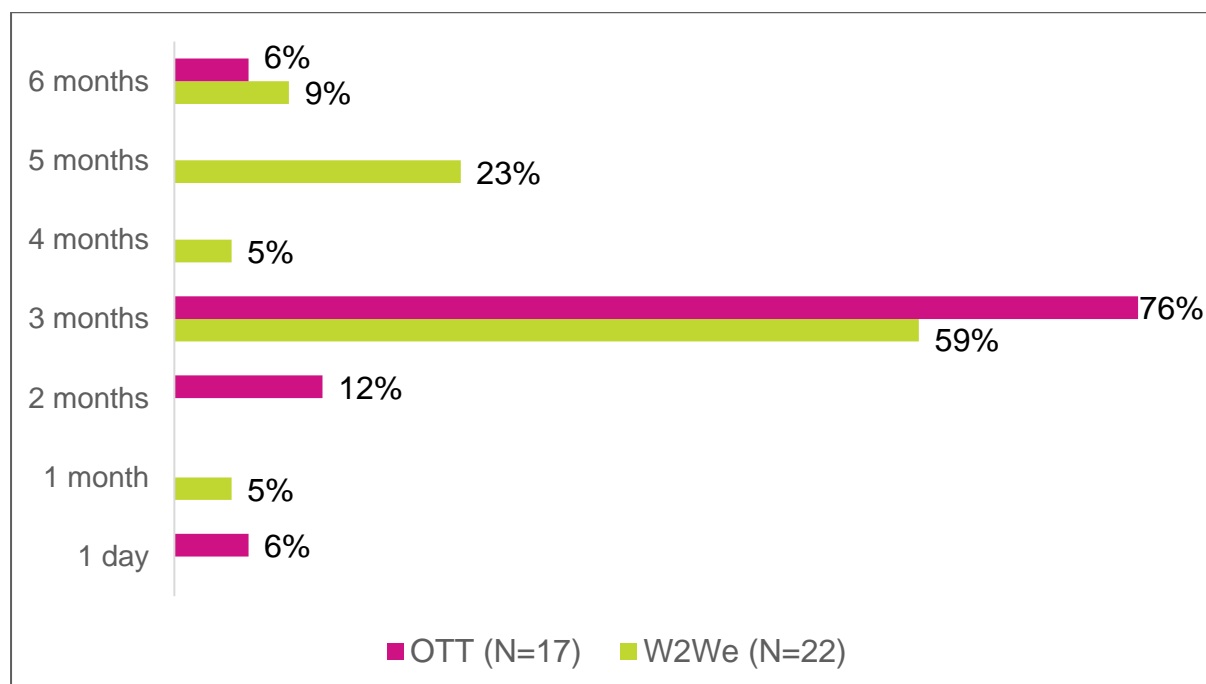
A.3 Use of e-cycles during loan period

This section reports on how e-cycles were used during OTT and W2We loan periods. It first identifies the duration of loans and then reports on the frequency of use of e-cycles in loan periods, the transport modes that were replaced and the purposes for which the e-cycles were used. It draws upon 17 responses by OTT participants and 22 responses from W2We participants to the relevant follow-up surveys. This sample is a small subset of the baseline survey respondents and hence the results can only be indicative of outcomes across all participants. It can be hypothesized that those participants who were more positive about their experience, and for whom it made more of a difference, were more likely to respond to the follow-up surveys and hence the results will represent an upper bound for positive outcomes of the pilot.

Duration of loans

Three months was the most common loan period both for OTT participants (76%, 13 of 17) and W2We participants (59%, 13 of 22) with some loans extending to six months (see Figure 20). There is also one OTT participant who borrowed the e-cycle for one day and one W2We participant for one month.

Figure 20. Duration of loans (OTT and W2We participants)³³

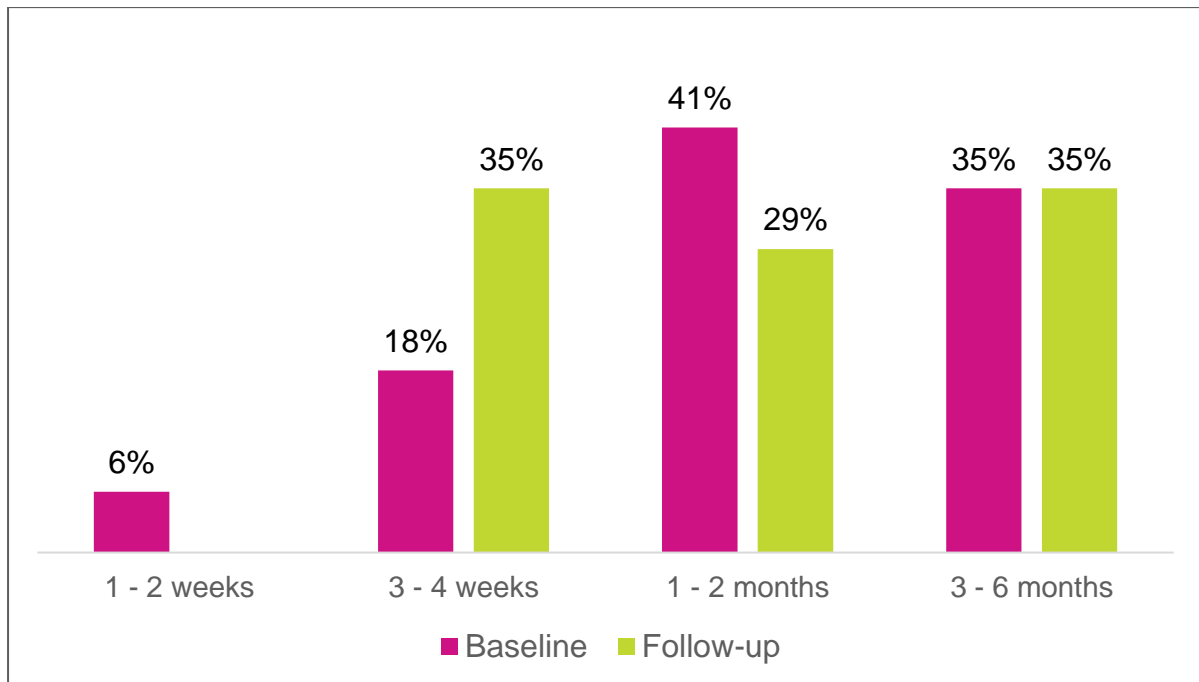


³³ Follow-up survey question OTT: How long did your organisation or business borrow an e-cycle or e-cycles for?

Follow-up survey question W2We: How long did you borrow an e-cycle for?

OTT participants were asked to indicate how much time is needed to get a proper feel for an e-cycle in both the baseline and follow-up survey (see Figure 21). Responses were fairly evenly distributed between 3-4 weeks, 1-2 months and 3-6 months at follow-up. This suggests the OTT loan periods of 3-6 months should have been adequate to enable the participants to familiarise themselves with their e-cycle and decide whether they would like to purchase their own one if that is a consideration for them. It also suggests a shorter time period of up to 2 months would have been sufficient for most participants.

Figure 21. Time needed to get a proper feel of an e-cycle (OTT participants / N=17)³⁴

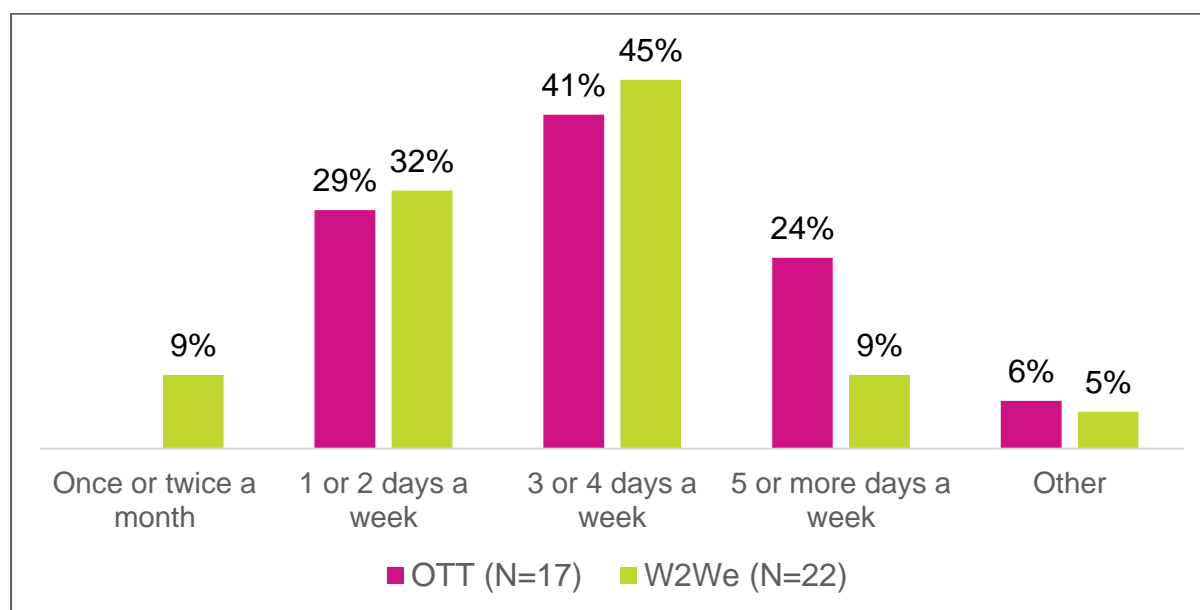


³⁴ Baseline and follow-up survey question is the same: How long do you think is needed for people to get a proper feel for an e-cycle that they are borrowing?

Frequency of use of e-cycle

Nearly all OTT and W2We participants used the e-cycle available to them more than once per week, with 3 or 4 days a week the most common response for both types of loans – 41% (7 of 17) for OTT participants and 45% (10 of 22) for W2We participants (see Figure 22).

Figure 22. Frequency of use of e-cycle during loan (OTT and W2We participants)³⁵



Note: Multiple responses allowed.

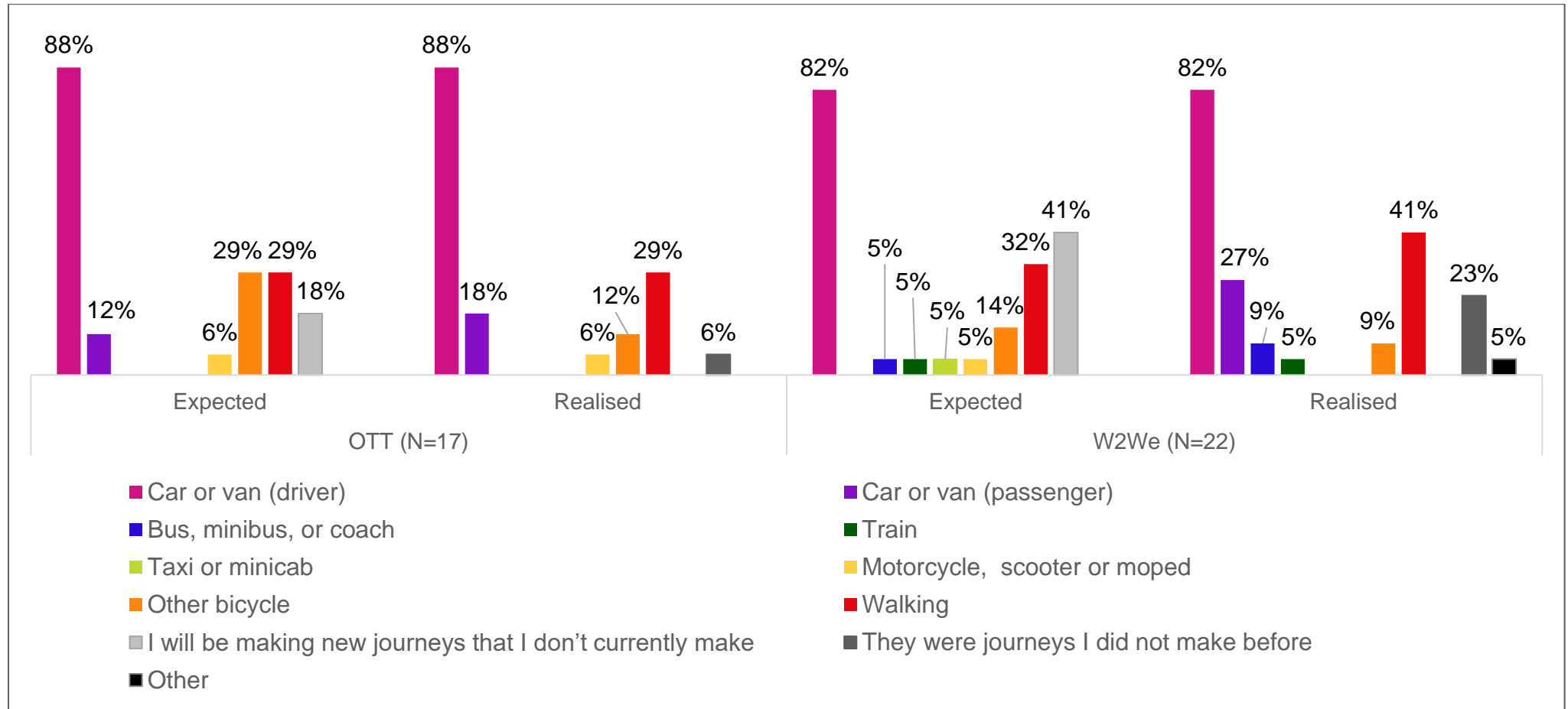
Transport modes replaced

It was shown in Section A.1 that e-cycle loan participants relied heavily on cars for their daily mobility needs prior to their participation in the pilot. They were asked in the baseline survey about their expectations for how e-cycle use would replace other transport modes and then asked in the follow-up survey what happened in reality.

Overall, 33 out of 39 loan participants (85%) said they replaced car driver trips and 14 out of 39 (36%) said they replaced walk trips (see Figure 23). This was very similar to the expectations of the loan participants before participating in the pilots. Only four participants (10%) said they used the e-cycle instead of another cycle. Six (15%) said they made a journey they would not have made otherwise, which implies the e-cycle expanded their travel opportunities. The results should be treated as indicative, considering this analysis is based only on participants completing both baseline and follow-up surveys and the number of responses was relatively small.

³⁵ Follow-up survey question: How frequently did you personally use an e-cycle borrowed through the scheme?

Figure 23. Expected and realised replacement of transport modes during e-cycle loan (OTT and W2We participants)³⁶



Note: Multiple responses allowed.

³⁶ Baseline survey question: What mode(s) of transport will your new e-cycle journeys replace?

Follow-up survey question: When you made journeys on the loan e-cycle what other modes of transport did it replace?

Journey purposes for which e-cycle used

E-cycle loan participants were asked in the baseline survey about the journey purposes for which they expected to use the e-cycle available to them and then in the follow-up survey about what journey purposes they used the e-cycle. Results are reported separately for each type of loan.

OTT loans

Figure 24 shows that the most common journey purpose that OTT participants expected to use the e-cycle available to them was for exercise/recreation (94%, 16 of 17) followed by getting to work (76%, 13 of 17). However, during the loan period the most common journey purpose was getting to work (82%, 14 of 17). The high level of use of OTT e-cycles for travel to work is not surprising given the e-cycles were loaned to employers for business use.

Figure 24. Expected and realised journey purposes during e-cycle loan (OTT participants / N=17)³⁷



Note: Multiple responses allowed. In the baseline survey for the other option one participant responded they were planning to use the e-cycle to get around their farm and another one for travelling to care for/ride horses.

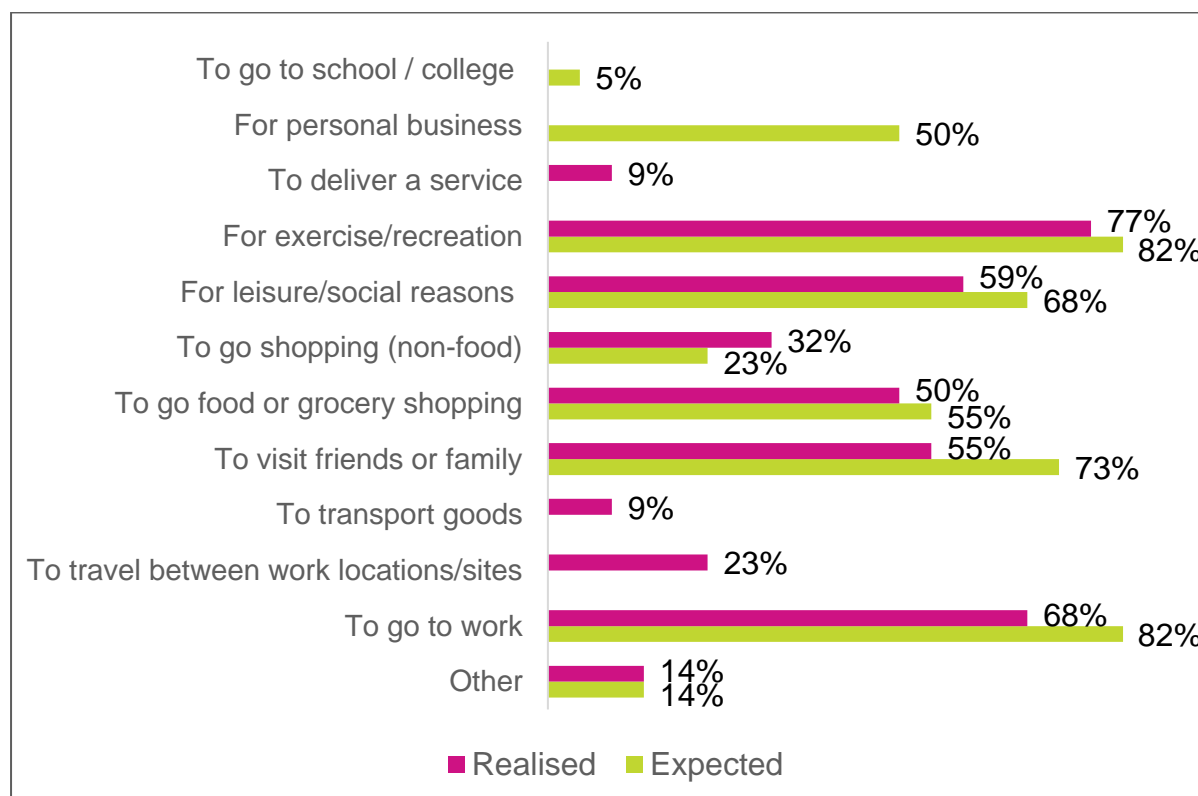
³⁷ Baseline survey question: What type of journeys do you intend to use the loan e-cycle for?

Follow-up survey question after: What type of journeys did you use the loan e-cycle for?

W2We loans

With W2We loans, most of the participants expected to use the e-cycle for multiple purposes including getting to work (82%, 18 of 22), exercise/recreation (82%, 18 of 22), visiting family and friends (73%, 16 of 22), and leisure and social reasons (68%, 15 of 22) (see Figure 25). During the loans, exercise and recreation (77%, 17 of 22) exceeded going to work (68%, 15 of 22). The two remaining expected purposes were also realised. Participants also used the e-cycles for purposes that they did not expect.

Figure 25. Expected and realised journey purposes during e-cycle loan (W2We participants / N=22)³⁸



Note: Multiple answers allowed. For the other category, one participant responded that they intended to use the e-cycle for freedom to explore Cornwall/avoid heavy summer traffic/ easy parking during busy holiday periods, one to reach the post office and bank in town, and another one for taking their child to the nursery. In the follow-up survey, two participants responded that they used the e-cycle to go to their allotment and one to visit lectures, talks in local institutes and art exhibits.

As highlighted in Section A.2, using the e-cycle to get to work was important for participants of both OTT and W2We loans and this is further discussed in Section A.5.

³⁸ See above.

A.4 Changes in cycle ownership, use and perceptions

This section assesses changes in cycle ownership, use and perceptions based on pilot participants who completed both baseline and follow-up surveys. The number of participants who completed follow-up surveys is a small subset of the baseline survey respondents (35 roadshow participants, 17 OTT participants and 22 W2We participants) and hence the results can only be indicative of outcomes across all participants. It can be hypothesized that those participants who were more positive about their experience, and for whom it made more of a difference, were more likely to respond to the follow-up surveys and hence the results will represent an upper bound for positive outcomes of the pilot. This section also includes analysis of what participants said in the phone interviews about their interest in buying an e-cycle.

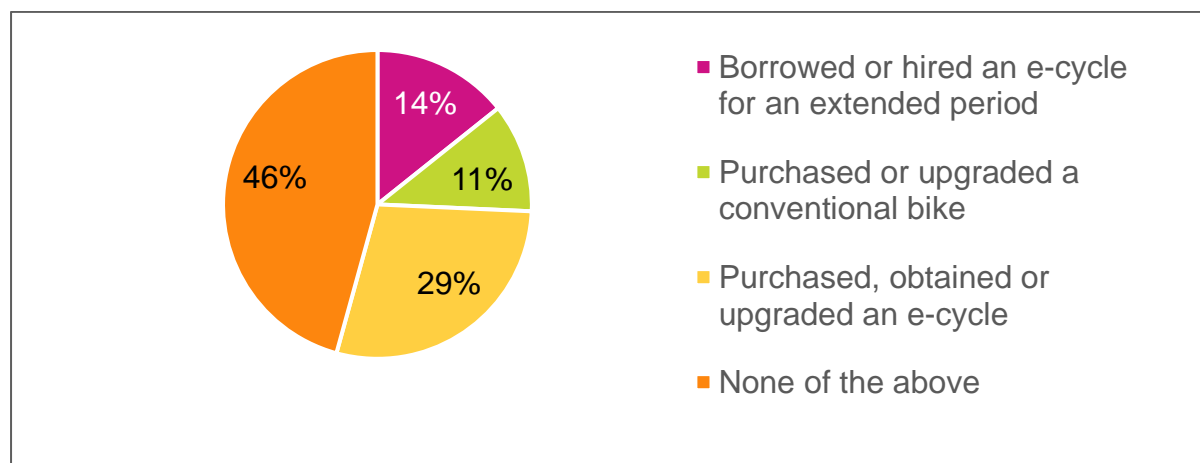
Cycle ownership

Of particular interest is whether the pilot interventions led to participants acquiring their own e-cycle. There were different sources of data on this. Firstly, a question was directly asked about what had happened since the intervention in the follow-up surveys. Secondly, there was also a repeated question about cycle ownership in both baseline and follow-up survey. Thirdly, there was the opportunity to explore this further in the phone interviews.

Acquisition of e-cycle after intervention

Roadshow participants who completed the follow-up questionnaire were directly asked if they had acquired an e-cycle or conventional cycle since the roadshow. Over half had done so. Specifically, 10 out of 35 participants (29%) said they had purchased, obtained or upgraded an e-cycle (see Figure 26).

Figure 26. Acquiring an e-cycle after roadshows (roadshow participants / N=35)³⁹



Note: Multiple responses allowed.

³⁹ Follow-up survey question: Since the e-cycle try-out event, have you...?

Four participants said they had purchased or upgraded a conventional cycle. Five participants said they had gone on to borrow or hire an e-cycle for an extended period, with most of these cases thought to be through the W2We loan scheme. This highlights the synergy between the opportunity to ride an e-cycle at a roadshow event and the longer-term W2We loan scheme.

OTT loan participants who completed the follow-up questionnaire were asked a different question to roadshow participants with the question asking both what their organisation had done afterwards and what they had done as an individual.⁴⁰ Three out of 17 participants (18%) said they had bought a personal e-cycle afterwards. Only two participants reported that their organisation is considering obtaining e-cycles in the future. Survey respondents could also tick 'other' and explain what had happened in their own words. A number of participants indicated they had arranged to continue the loans, or wished to do so, and others that they were seriously considering acquiring an e-cycle for themselves or for their organisation.

"I have hired the bikes for a further 2 months."

"I have ended the hire contract for November to January, on the basis that cycling in the area, with its narrow twisting, ultra-steep lanes, will be too risky in the dark, damp and slippery roads of winter, but with spring I plan to renew the contract."

"I hired one personally and used this to cycle to work and visit patients."

"I have returned the bike and consider buying an e-cycle in the future."

"I am saving to buy an e-cycle."

"I consider purchasing an e-cycle but need to find something suitable and in budget."

Two participants said they had been prompted to use other forms of transport.

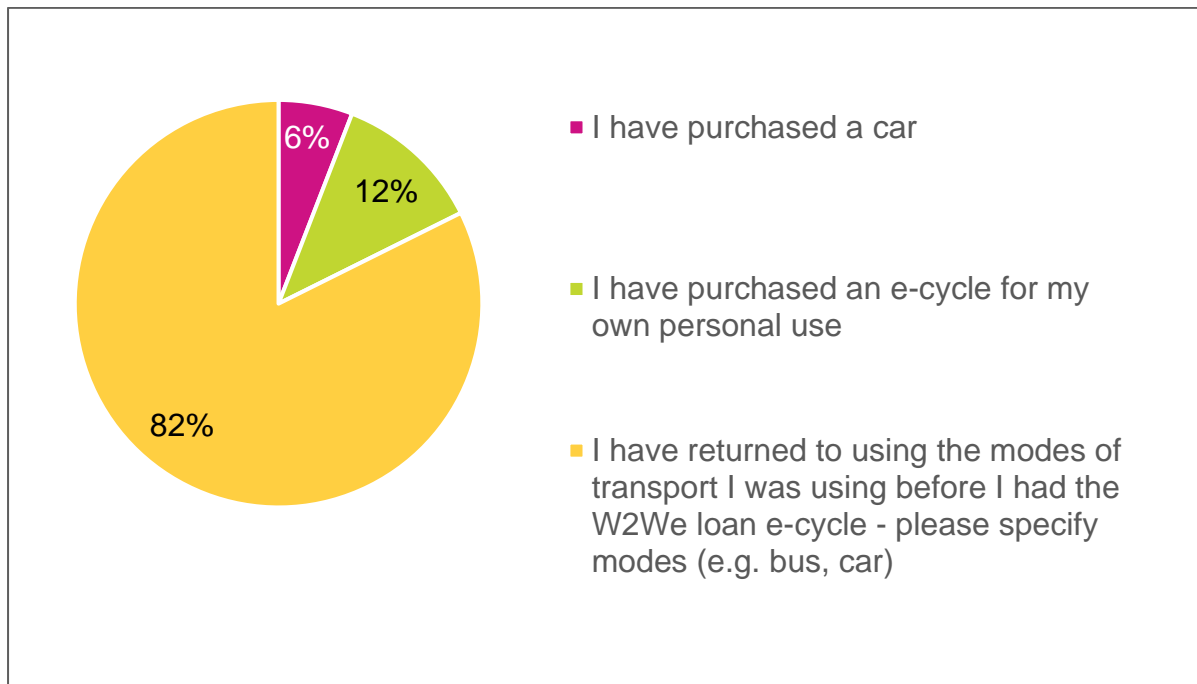
"I bought a motorcycle."

"I started to use the road bike to commute to work."

W2We participants who completed the follow-up questionnaire were directly asked if they had purchased an e-cycle since the loan. Figure 27 shows two out of 17 participants (12%) who answered this question purchased an e-cycle for personal use. Most participants returned to using the modes of transport they used before the loan – which were the car for 10 out of 14 participants and walking, public transport or a combination of modes for the other four participants.

⁴⁰ Follow-up survey question: What has happened since the e-cycle loan?

Figure 27. Acquiring an e-cycle after loan (W2We participants / N=17)⁴¹



Note: Multiple responses allowed.

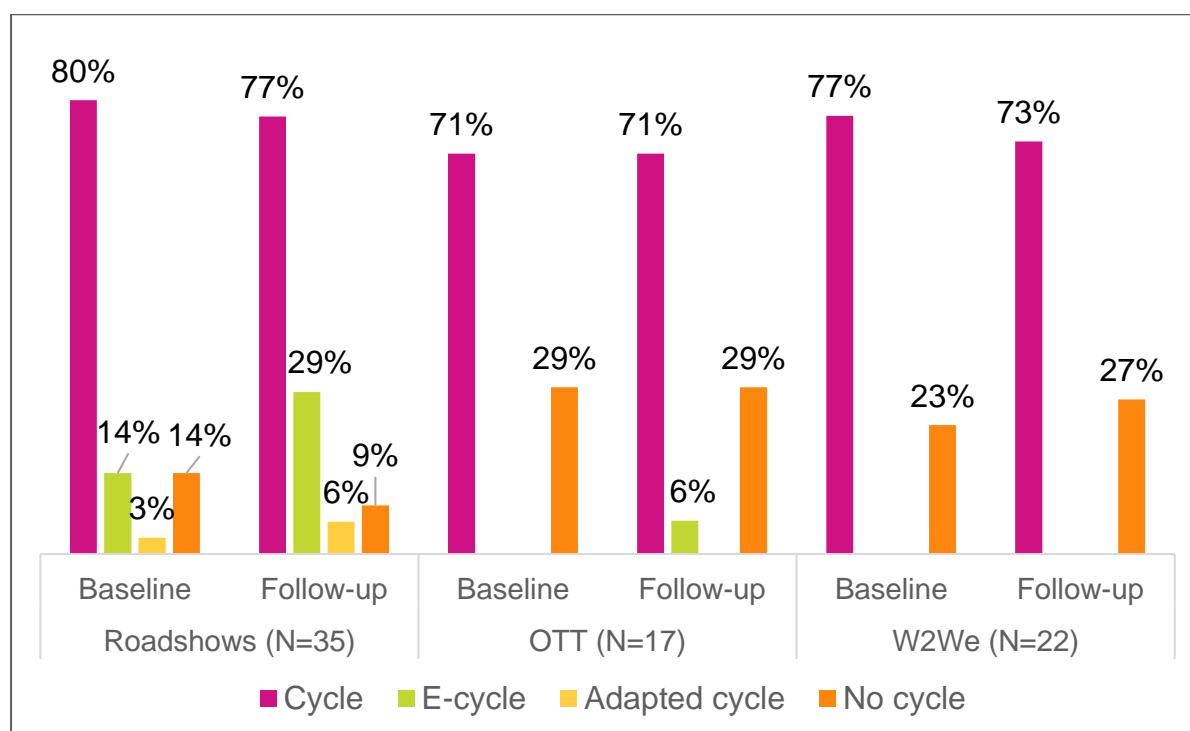
⁴¹ Follow-up survey question: What has happened since the W2We loan?

Cycle ownership before and after intervention

Participants were asked the same question about whether they had a cycle, e-cycle and adapted cycle in the baseline survey and in the follow-up survey. The results below compare aggregate responses at baseline and follow-up (Figure 28) and then they look at the extent of individual-level change (see Table 1-Table 3).

Figure 28 shows an increase from 14% (5 of 35) to 29% (10 of 35) roadshow participants having their own e-cycle and corroborates the previously reported result that a number of roadshow participants went on to acquire an e-cycle. There was an increase from zero to 6% (none to 1 of 17) OTT participants having their own e-cycle but no W2We participants reported having an e-cycle before or after the loan period.

Figure 28. Comparison of cycle ownership (baseline and follow-up)⁴²



Note: Multiple responses allowed.

The same data can be analysed by looking at individual-level change in cycle ownership via transition tables. This is largely confirmatory of the results above but reveals the nature of changes made by individuals. For roadshow participants, it can be seen from Table 1 that four people who had a conventional cycle before the

⁴² Baseline survey question roadshows, OTT, W2We and follow-up roadshows: Do you own or have use of any of the following? This could include vehicles that you own, loan, hire or use that belong to someone else [e.g. a family member or friend.]

Follow-up survey question OTT and W2We: Outside of the e-cycle loan scheme, do you own or have use of any of the following? This could include vehicles that you own, loan, hire or use that belong to someone else [e.g. a family member or friend.]

roadshow had supplemented it with an e-cycle, one supplemented it with an adapted cycle and one replaced a conventional cycle with an e-cycle. One person who did not have a cycle of any type before the roadshow acquired an e-cycle and one acquired a conventional cycle.

For OTT participants, it can be seen from Table 2 that one person who had a conventional cycle before the roadshow had supplemented it with an e-cycle and from Table 3 that no W2We participants acquired an e-cycle.

It can be seen from the transition tables that where e-cycles are being acquired they are generally supplementing existing personal cycles. In total there are seven people out of 74 who reported gaining an e-cycle after the pilot. Five out of these seven people said they were considering buying an e-cycle at baseline and hence their participation appears to have tipped them into going out and buying their own e-cycle.

Table 1. Cycle ownership transitions (roadshow participants)⁴³

BEFORE	AFTER						Total
	Bicycle	Bicycle, adapted cycle	Bicycle, e-cycle	E-cycle	E-cycle, adapted cycle	None of the above	
Bicycle	19	1	4	1			25
Bicycle, E-cycle	1		1				2
Bicycle, e-cycle, adapted cycle					1		1
E-cycle				2			2
None of the above	1			1		3	5
Total	21	1	5	4	1	3	35

Note: Orange shows decrease of number of bicycles, yellow shows no changes and green shows increase.

⁴³ Baseline and follow-up survey question: Do you own or have use of any of the following? This could include vehicles that you own, loan, hire or use that belong to someone else [e.g. a family member or friend.] Select all that apply.

Table 2. Cycle ownership transitions (OTT participants)⁴⁴

BEFORE	AFTER			Total
	Bicycle	Bicycle, e-cycle	None of the above	
Bicycle	11	1		12
None of the above			5	5
Total	11	1	5	17

Note: Orange shows decrease of number of bicycles, yellow shows no changes and green shows increase.

Table 3. Cycle ownership transitions (W2We participants)⁴⁵

BEFORE	AFTER		Total
	Bicycle	None of the above	
Bicycle	16	1	17
None of the above		5	5
Total	16	6	22

Note: Orange shows decrease of number of bicycles, yellow shows no changes and green shows increase.

⁴⁴ Baseline survey question: Do you own or have use of any of the following? This could include vehicles that you own, loan, hire or use that belong to someone else [e.g. a family member or friend.] Select all that apply.

Follow-up survey question: Outside of the e-cycle loan scheme, do you own or have use of any of the following? This could include vehicles that you own, loan, hire or use that belong to someone else [e.g. a family member or friend.] Please tick all that apply.

⁴⁵ See above.

Phone interviews – impact of the pilot on interest in buying an e-cycle

The interviews explored whether participants had gone on to buy their own e-cycle or were considering it. The participants can be grouped into four categories on this basis and the following account refers to each of the 15 interviewees in considering where they were positioned in terms of buying their own e-cycle.

Made a decision to buy an e-cycle

Emma and William, two roadshow participants, had bought an e-cycle after attending the roadshow events. William emphasised that the roadshow enabled him to try out different types of e-cycles and get an idea of what riding an e-cycle was like – without the pressure to buy one (see [Case Study C](#)). Emma wanted to try an e-cycle at the roadshow to see if it might encourage her to return to cycling and subsequently purchased a folding e-cycle which she is now using five days a week or more for work and for visiting family and friends.

For Karen, an OTT participant, the loan helped her to confirm that she would use an e-cycle and what type and size of e-cycle to buy. After the loan, she purchased an e-cycle and is using it to replace car journeys.

“At end of May/beginning of June, they asked for it back. So, I ordered one then and now I’ve got my own. It’s actually the same make. I got on with it so well, it’s such a comfortable ride, it takes to the hills really well, the battery lasts for ages. They were really good, the ones we got.”

Finally, Leon, a W2We participant, mentioned that after the experience of using the loan e-cycle for three months he had purchased an e-cycle through the Government’s Cycle to Work scheme after the loan period.

“I would have extended the loan period had the bike to work scheme not become available at the end of that period. Certainly three months was enough time to be able to get a real-world use of the bike to see whether it would work or not ... I’m in the process of acquiring one now. I’m just waiting for my bike to turn up... I wasn’t contemplating it really before but now I’m doing just that.”

Leon’s wife had also tried the loan e-cycle on several occasions and is now keen to explore purchasing one, although cost is a barrier.

Still in the process of making a decision to buy an e-cycle

A few interviewees were considering buying an e-cycle in future. Rose, a roadshow participant, had not been contemplating buying an e-cycle, but when the roadshow came to her workplace, she was curious to try one. She found it really interesting and based on the experience she is ‘mooting it’. If she were to buy an e-cycle, she would use it in place of the car for the journey to work and to visit friends locally.

Gabriel, a roadshow participant, attended the roadshow to try the latest e-cycle models and found they were more powerful than one he had before. He was very impressed by the range of e-cycles presented at the roadshow and is saving up to get another one, which he anticipates using to get to work and for exercise.

“I think when I go forward next year, I'm gonna go more for the slightly wider tyres, mountain biking, type one, because it's just purely the nature of the areas around here. There's a lot of rough terrain.”

Edward, a W2We participant, had extended his loan twice and had reduced his car use during the loan period. With the end of the loan coming up, he had got used to the e-cycle and was planning on saving for his own one:

“Now I've had it for this amount of time, I think I'd find it hard to do without it. So I think I will, once I thread money together, have to do my best to get one of my own if this isn't available any more. It's just delayed that necessity to contemplate purchasing my own one.”

Would like to buy an e-cycle but the cost makes this prohibitive

Several participants, although keen to buy an e-cycle and use it for daily travel, raised the issue of the cost of e-cycles.

Elizabeth, an OTT participant, was planning on returning to her motorcycle at the end of the loan, whilst thinking about how to afford an e-cycle. When asked about buying her own e-cycle she replied:

“Yeah, I would be buying one at some point. So just trying to work out how long is the battery life that is the main issue. And I know also the technology is catching up, you know is moving on all the time. But I do know some people who've bought a £2000 bike and then 18 months, two years later need to pay £700 for the new battery. So if there was an affordable way of doing it, yeah.”

Nancy, a W2We participant, viewed the loan scheme as a great way for people to try out e-cycles and she is now more interested in having her own e-cycle, albeit second-hand. She was coming to the end of her loan and was asked whether she would have been happy to continue the loan with a monthly fee if that was possible:

“Yes I would I suppose, but if I could have afforded it I would have liked to have bought it rather than pay monthly.”

Georgia, W2We participant, had positive perceptions of the benefits of e-cycles but cost was a barrier to getting one. She used her loan e-cycle to replace many car and walking trips in the town she lived, saying she ‘was surprised how much she used it’. She would have liked to have extended the loan indefinitely and said about buying an e-cycle and the impact of the scheme.

“I might do, but I am still kind of weighing it up, you know it's about having the cash up front, isn't it? It's made it much more likely. It's cost and time to decide what the right one is.”

Oliver, a W2We participant, had thought about buying an e-cycle but thought they are too expensive (see [Case Study A](#)).

Sara, another W2We participant, said she would have liked the loan to be indefinite, as £3,000 is too much to spend on buying her own e-cycle.

“I can't go out and spend £3,000 on one. It wouldn't warrant that amount of money to buy one for the job I'm doing, you know what I mean, minimum

wage. It would take me an awful long time to earn that money back. And I wouldn't use it enough to make it viable. A lot of people would probably be thinking well they can afford £40 a month (£10 a week or whatever) but not more than that."

However, Sara said it had been at the back of her mind for a long time to get an e-cycle to replace a gas-guzzling second car but she and her partner are unsure whether it would replace the journeys for which the second car is used – *"a real dilemma we're in at the moment"*.

Lastly, James, a W2We participant, found the e-cycle loan helped him get out more to go shopping, see friends and go on trips out generally. However, he cannot afford to buy his own e-cycle given his low income (he is on tax credits) and wished there was a longer-term loan scheme for those on low incomes. He had heard about Cornwall participating in a national initiative for cycling to be prescribed by GPs and was interested to see if he could get an e-cycle through that once it started.

Found an e-cycle was not appropriate for their needs

For other reasons than cost, some interviewees rejected the possibility of buying an e-cycle based on it not being suitable for their daily travel needs.

Charles, an OTT participant, had just started a new job prior to the OTT loan and had been borrowing a car from a friend and thinking about getting a moped or scooter from Wheels 2 Work but took up the opportunity to borrow the e-cycle. Charles explained how he had gone on to buy a motorcycle after the loan period.

"When I looked at the cost of a motorbike and an e-cycle, I saw the motorbike was a better deal really because the cost difference is quite the deciding factor and although I don't get the benefits of exercise with a motorcycle, I can travel longer distances and it is more convenient. If I could afford to have them both, I would."

Ellie, an OTT participant, had never tried an e-cycle before. She used the e-cycle for her 17 mile commute but needed to allow more time for the journey. This extra time spent travelling meant she had less time for doing a run or walking the dog before work. She was very pleased to have tried out the e-cycle but found it to be bigger and heavier than expected. When asked whether she was considering getting one afterwards she said:

"No, I'm not going to get one. The loan was to see if I could commute to work, and I couldn't. It was too expensive just to use it to go on the odd evening ride with my husband."

Case Study C: William – bought e-cycle after roadshow

About William

William is in his late 40s and is in full-time employment. There is one car in his household, which has an income of more than £50k per annum.

Experience with cycling

William has always had a cycle since childhood. Despite a back injury which makes cycling uncomfortable, he had recently been using his cycle for short journeys. He was consciously trying to reduce his car use as it is part of his job to encourage others to reduce car use.

Motivation for trying e-cycle at roadshow

Before the roadshow, William was not sure about buying an e-cycle as he was unsure if he would get used to it and whether it could replace car journeys. He could see the benefits of saving petrol costs and not having to put so much effort into cycling, thus making it more comfortable for his back.

Opinion of the roadshow

William tried a 'road bike' at the roadshow and had a ride for about 10 minutes on a route which included a steep slope, which was useful. He found it helpful to try it out without pressure to buy.

"...until I actually had an opportunity to go and do that in an environment where I wasn't being expected to buy it, or make a decision, because I think otherwise I would have gone to a showroom and tried one out but it always feels a bit like, I don't know, you are not obligated clearly because it's an expensive purchase, but there is a bit of reluctance to go and try it out and wander off and not make a decision."

Travel behaviour after the roadshow

William bought a mountain bike style e-cycle from a neighbour who had bought the wrong size and could not return it. He would not have thought of buying a mountain bike, but is now using it off-road on local trails. He also uses the e-cycle to replace short car journeys. The purchase of the e-cycle has been positive, enabling journeys that were too far to walk and which he would not have cycled previously because they were too hilly. When asked about the role of e-cycles in Cornwall generally, William said:

"They do flatten out the landscape a bit, not totally. I was a bit unsure what to expect really in terms of how much they do that and you still have to use the gears and some effort. In a way, I suppose I was put off a little bit because it didn't feel like it would be 'real cycling'. There might not be any effort involved at all but there is. So, it keeps me happy enough, Although the infrastructure is not that brilliant for it. There are not that many secure places to leave your bike. Nowhere that you could charge your bike if you took it out, and of course they are expensive as well, even the cheapest ones are pretty expensive, which does limit it a bit."

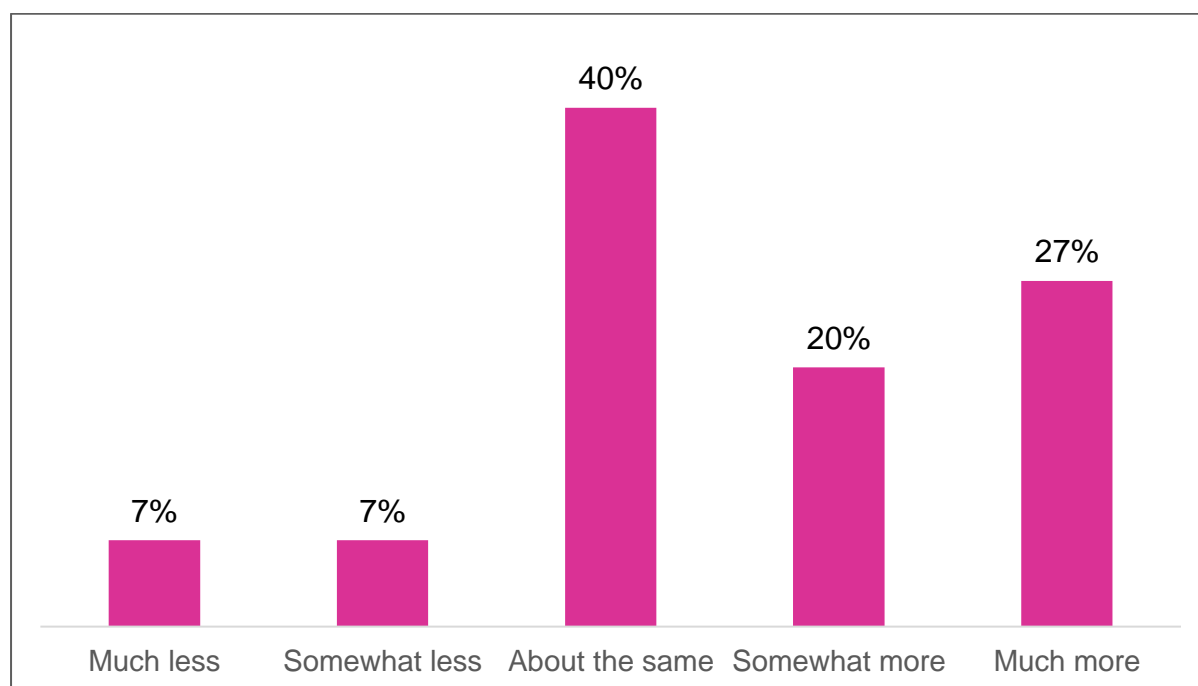
Cycle use

As well as cycle ownership, it was of particular interest whether the pilot interventions influenced the frequency of cycle use, whether this was using an e-cycle or conventional cycle. A direct question was asked of roadshow participants about whether their cycling had decreased, increased or stayed the same. There is a risk of social desirability bias in responses to this question and therefore a better source of data is the repeated question about cycling frequency which was asked in the baseline and follow-up surveys for all three interventions. This is reported below, after the results from the direct question.

Change in cycling frequency reported by roadshow participants

Figure 29 shows that 14 of 30 participants (47%) said they were cycling more after the roadshow, with four out of 30 cycling less.

Figure 29. Change in cycling frequency (roadshow participants / follow-up / N=30)⁴⁶

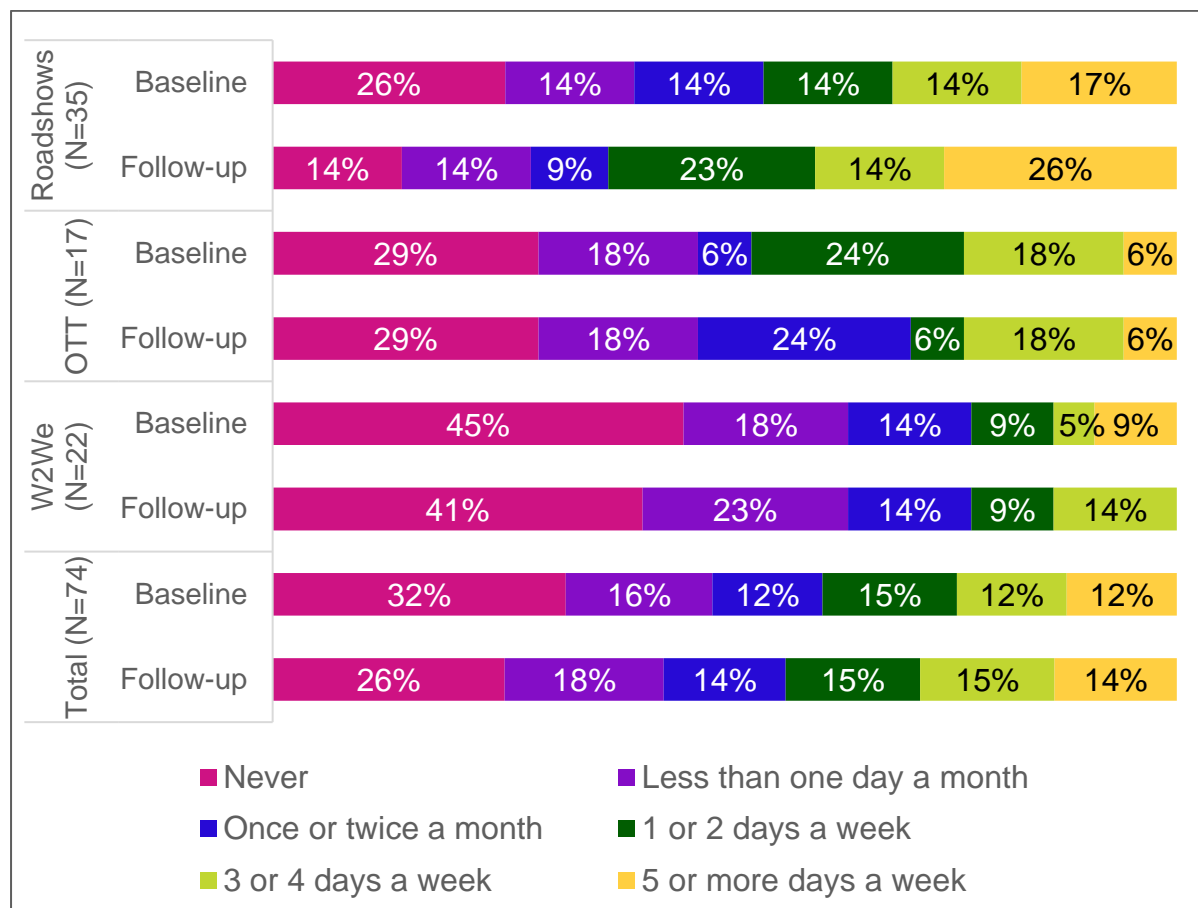


⁴⁶ Follow-up survey question: Compared to the time of the try-out event, on average, are you currently cycling: a) much less, b) somewhat less, c) about the same, d) somewhat more or e) much more?

Cycling frequency before and after intervention

Figure 30 shows pre- and post-intervention cycling frequencies for pilot participants who completed both the baseline and follow-up surveys. In total, 39% of participants (29 of 74) can be characterised as frequent cyclists (riding at least weekly), 28% as occasional cyclists (less than weekly) (21 of 74) and 32% as non-cyclists (24 of 74). At follow-up, frequent cyclists increased to 43% of participants (32 of 74), occasional cyclists increased to 31% (23 of 74) and non-cyclists decreased to 26% (19 of 74).

Figure 30. Comparison of cycling frequency (baseline and follow-up)⁴⁷



46% (16 of 35) of roadshow participants were frequent cyclists at baseline, which increased to 63% (22 of 35) at follow-up. For OTT participants, there was a decrease in the number of frequent cyclists from 47% (8 of 17) to 29% (5 of 17). W2We

⁴⁷ Baseline survey question: On average, how often would you say that you currently travel using a bicycle, e-cycle, or adapted cycle?

Follow-up survey question roadshows: On average, how often would you say that you currently travel using a bicycle, e-cycle, or adapted cycle?

Follow-up survey question OTT and W2We: Aside from trips on the loan e-cycle, on average how often would you say that you currently travel on any type of bicycle?

participants cycled less prior to participation than roadshow and OTT participants. The number of frequent cyclists remained the same at baseline and follow-up (23%, 5 of 22).

The same data can be analysed by looking at individual-level change in cycling frequency using transition tables. Table 4 verifies the previously observed net increase in cycling amongst roadshow participants, with 13 participants increasing their cycling six decreasing it and 16 not changing their frequency. Six of those increasing their cycling had not been cycling at all prior to the roadshow.

Table 5 shows that five OTT participants increased their cycling and four decreased it, resulting in a small net increase in cycling levels. Table 6 shows that four W2We participants increased their cycling and four decreased it.

Table 4. Cycling frequency transitions (roadshow participants)⁴⁸

BEFORE	AFTER						Total
	Never	Less than one day a month	Once or twice a month	1 or 2 days a week	3 or 4 days a week	5 or more days a week	
Never	4	1		1	2	1	9
Less than once a month		2	1	1		1	5
Once or twice a month		1	1	2		1	5
1 or 2 days a week		1		2	2		5
3 or 4 days a week	1		1	2	1		5
5 or more days a week						6	6
Total	5	5	3	8	5	9	35

Note: Orange shows decrease of number of bicycles, yellow shows no changes and green shows increase.

⁴⁸ Baseline and follow-up survey question: On average, how often would you say that you currently travel using a bicycle, e-cycle, or adapted cycle?

Table 5. Cycling frequency transitions (OTT participants)⁴⁹

BEFORE	AFTER						Total
	Never	Less than one day a month	Once or twice a month	1 or 2 days a week	3 or 4 days a week	5 or more days a week	
Never	3		1		1		5
Less than one day a month		2	1				3
Once or twice a month			1				1
1 or 2 days a week	1		1	1	1		4
3 or 4 days a week	1				1	1	3
5 or more days a week		1					1
Total	5	3	4	1	3	1	17

Note: Orange shows decrease of number of bicycles, yellow shows no changes and green shows increase.

⁴⁹ Baseline survey question: On average, how often would you say that you currently travel using a bicycle, e-cycle, adapted cycle?

Follow-up survey question: Aside from trips on the loan e-cycle, on average how often would you say that you currently travel on any type of bicycle?

Table 6. Cycling frequency transitions (W2We participants)⁵⁰

BEFORE	AFTER					Total
	Never	Less than one day a month	Once or twice a month	1 or 2 days a week	3 or 4 days a week	
Never	9	1				10
Less than one day a month		3		1	1	4
Once or twice a month		1	1	1		3
1 or 2 days a week			1			2
3 or 4 days a week					1	1
5 or more days a week			1		1	2
Total	9	5	3	2	3	22

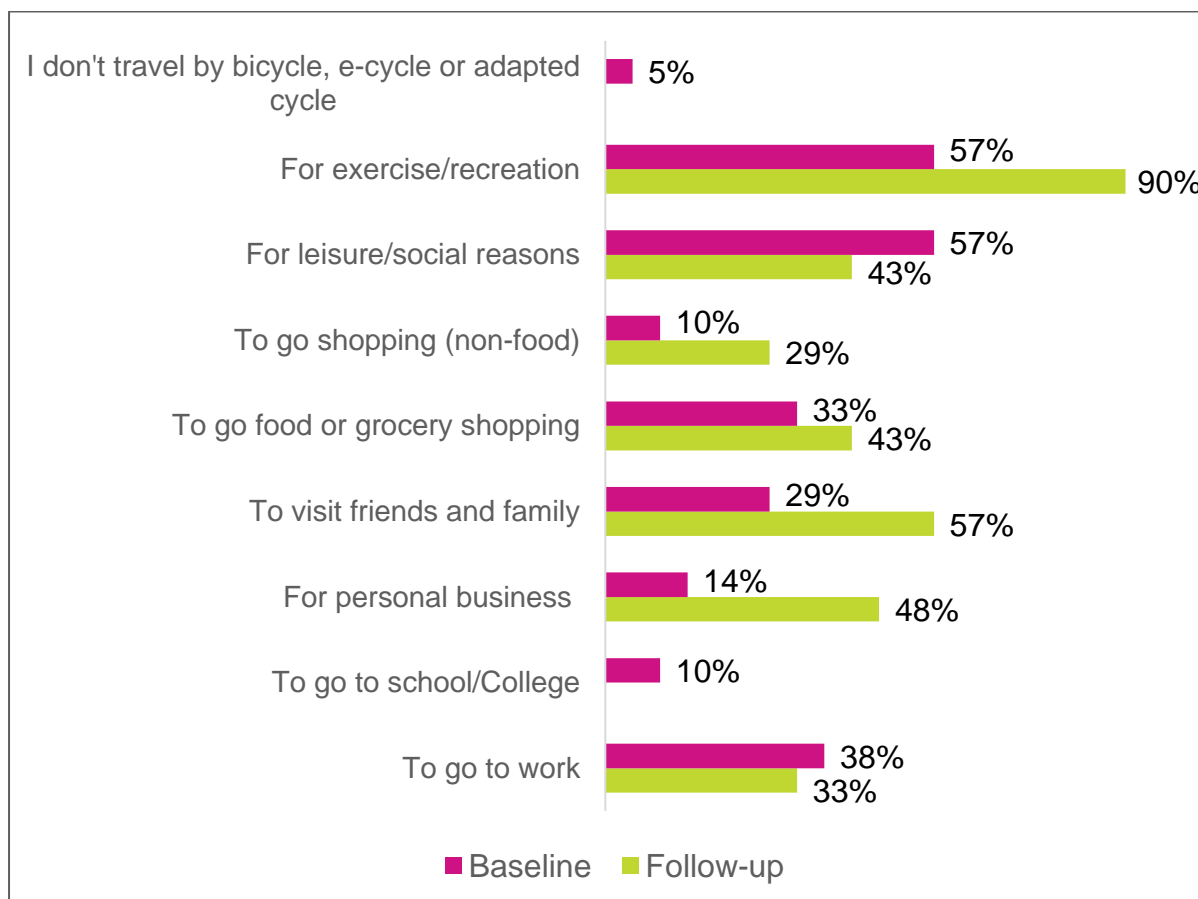
Note: Orange shows decrease of number of bicycles, yellow shows no changes and green shows increase.

⁵⁰ See above.

Journey purposes for cycling

Roadshow participants reported the largest increases in cycle use. For roadshow participants who completed both baseline and follow-up surveys, a comparison can be made of the journey purposes for which they were cycling at baseline and follow-up (21 participants). Figure 31 shows 57% of participants (12 of 21) cycled for leisure and social purposes and 57% for exercise and recreation (12 of 21) at baseline. Cycling for exercise / recreation increased substantially at the follow-up (90%, 19 of 21). This result may have been influenced by many of the roadshow survey responses having been received in the months of July and August when the weather is generally more amenable to cycling and many people are on holiday. Cycling to visit friends and family increased also and was the second most popular purpose (57%, 12 of 21) at the follow-up. These results are in contrast to the findings on the use of e-cycles during the loan schemes, where getting to work was the most common journey purpose.

Figure 31. Journey purposes for cycling (roadshow participants / N=21)⁵¹



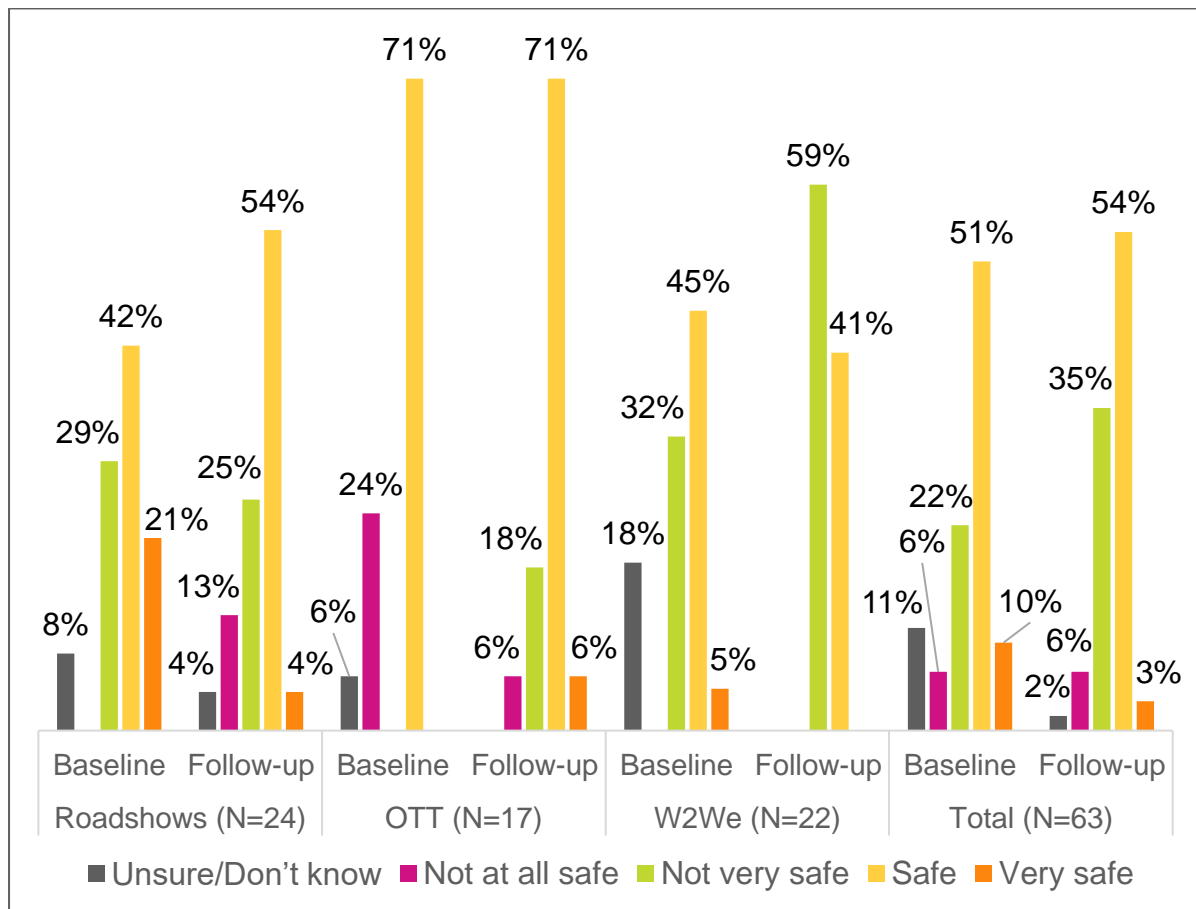
Note: Multiple responses allowed.

⁵¹ Baseline and follow-up survey question: Do you travel by bicycle, e-cycle or adapted cycle for any of the following reasons?

Cycling perceptions

Figure 32 shows that feelings of safety cycling on roads changed little after the pilot interventions. The total percentage of participants feeling safe decreased from 61% (38 of 63) to 57% (36 of 63) across all interventions. While the reason for this decrease is not known, one interviewed W2We participant (see [Case Study A](#) on page 30) mentioned avoiding main roads they used when they drove to work and choosing a longer (safer) route. This highlights that the experience of cycling may be less positive in reality than expected.

Figure 32. Comparison of feeling safe cycling on roads (baseline and follow-up)⁵²

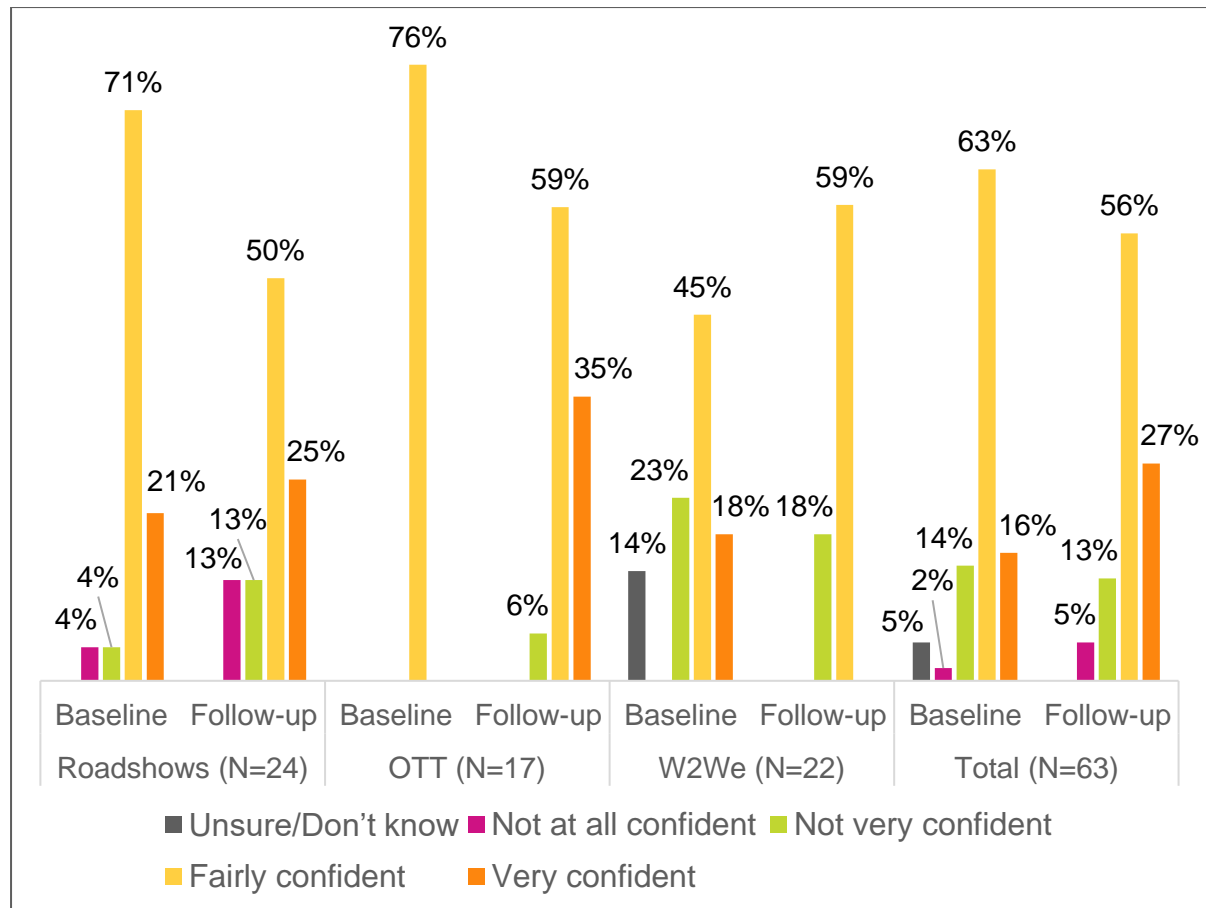


⁵² Baseline and follow-up survey question roadshows: Before today's activity/event, how safe did you feel cycling on roads in your local area?

Baseline and follow-up survey question OTT and W2We: How safe did you feel cycling on roads in your local area?

Notwithstanding, the percentage of participants feeling confident cycling on roads increased from 79% (50 of 63) to 83% (52 of 63) across all interventions, indicating there was no clear overall change in cycling perceptions (see Figure 33).

Figure 33. Comparison of feeling confident cycling on roads (baseline and follow-up)⁵³



⁵³ Baseline and follow-up survey question roadshows: Before today's activity/event, how confident did you feel cycling on roads in your local area?

Baseline and follow-up survey question OTT and W2We: How confident did you feel cycling on roads in your local area?

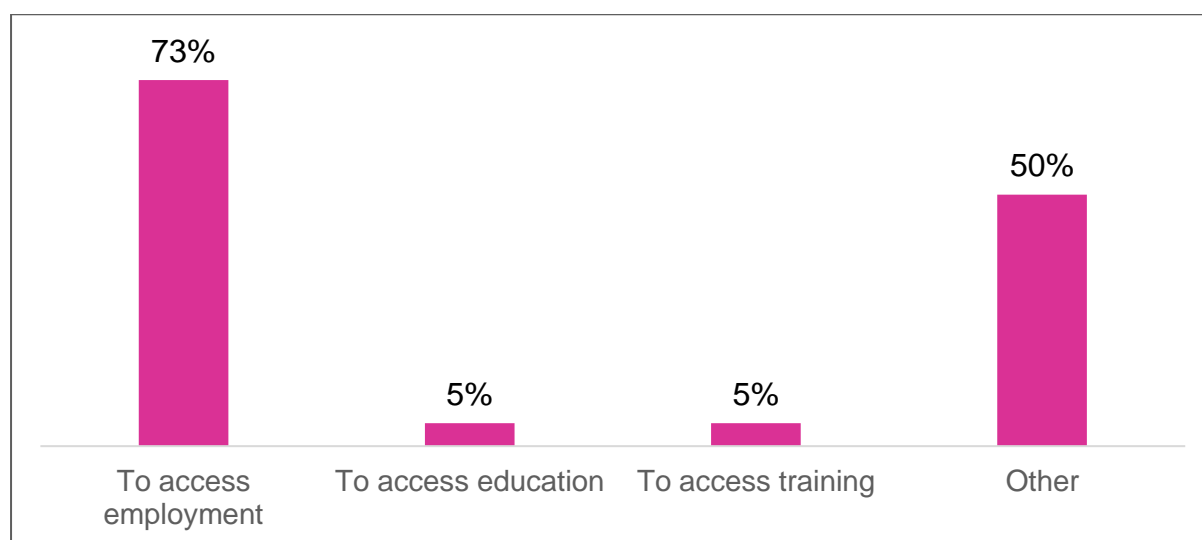
A.5 Wider impacts

Participation in the e-cycle pilot schemes had the potential to influence several aspects of the daily lives of the participants. This section reports results on the how e-cycles influenced access to opportunities, physical activity levels and transport modes used. The results are based on participants who completed baseline and follow-up surveys (35 roadshow participants, 17 OTT participants and 22 W2We participants). As stated previously, those participants responding to the follow-up survey may be more positive about their e-cycle experience and it may have made more of a difference to them, hence the results should be considered as an upper bound for positive outcomes of the pilot. This section also includes a case study from the phone interviews which illustrates how an e-cycle can help with accessing employment.

Access to employment, education and training

W2We participants were asked in the follow-up survey whether their e-cycle loan was for the purpose of helping access to employment, education or training, or for another reason. Access to employment was indicated by 16 out of 22 participants (73%) and access to education and training by one participation each (see Figure 34). 'Other' responses included improving health and fitness, reducing reliance on car travel and saving money on fuel. Of the 16 people using the loan to access employment, one had gone on to purchase a car, two had purchased an e-cycle for personal use and ten had returned to using the modes of transport they were using before the W2We loan.

Figure 34. Reasons for loans (W2We participants / N=22)⁵⁴

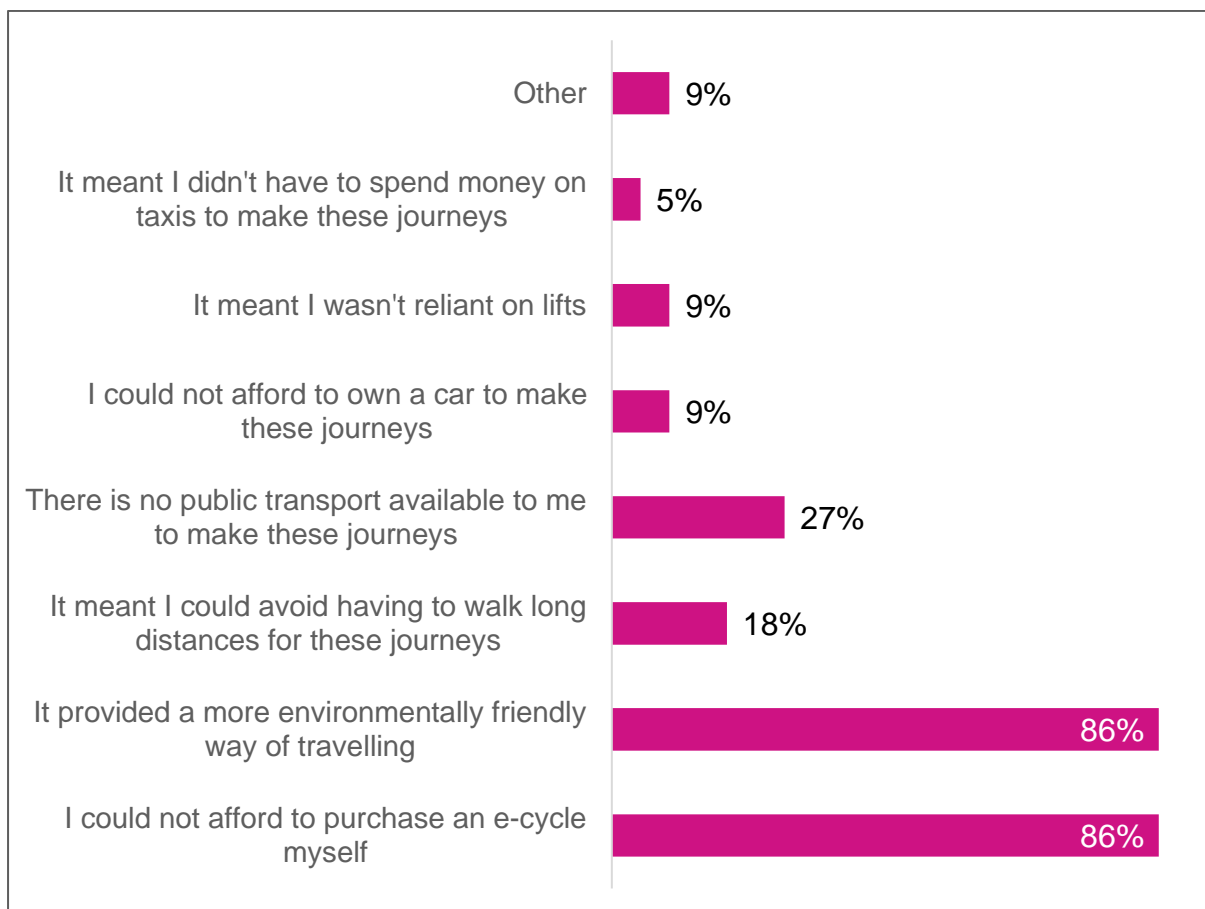


Note: Multiple responses allowed.

⁵⁴ Follow-up survey question: What was the reason for your W2We loan?

The W2We participants were then asked how the loan e-cycle helped them make journeys for the purpose mentioned in the previous question (see Figure 35). The two most frequent responses were not being able to afford to purchase an e-cycle (19 participants) and the e-cycle being a more environmentally friendly way of travelling (19 participants). No public transport available was mentioned by six participants and avoiding walking long distances by four participants. Two participants provided other reasons. One participant referred to riding a conventional bike exacerbating a chronic health condition, and another one said *“it has allowed me to get out and about more”*.

Figure 35. How e-cycle loan helped make journeys (W2We participants / N=22)⁵⁵



Note: Multiple responses allowed.

⁵⁵ Follow-up survey question: How did the W2We loan e-cycle help you to make these journeys?

Phone interviews – e-cycle assisting with access to employment and wider mobility

There were two participants in their 60s who were not car drivers for whom loaned e-cycles made clear contributions to accessing employment and other opportunities.

Charles, an OTT participant, used his loan e-cycle to get to a part-time job which was too far to walk to and not accessible by public transport (see [Case Study D](#)).

James, a W2We participant, had stopped driving in 2020 and mostly walked, got lifts and used buses. He used his e-cycle for shopping, getting to the town centre, for trips out and seeing friends and family. He was asked if the e-cycle enabled him to make journeys he could not do otherwise:

“Yes – shopping and visiting local friends and towns. It has expanded my circle of travel significantly so opening up work and social options with no car available and poor buses locally.”

After the loan ended, James looked into whether there were other options for someone like himself, with health constraints and a low income, to access an e-cycle. He found a new initiative where GPs prescribe cycling but it had not yet started in Cornwall.

Case Study D: Charles – getting to part-time job

About Charles

Charles is in his late 60s and works part-time. He does not have a car or other motorised vehicle. His household income is less than £10k per annum.

Experience with cycling

Charles had a conventional cycle when he first moved to Cornwall (seven years ago) but gave up cycling because of the hills.

Motivation for OTT loan

Charles had just started a new part-time job prior to the OTT loan and was looking for reasonably priced transport to get there. Buses are not an option as his shift starts at 4am. Charles had looked into getting a moped or scooter from Wheels 2 Work but took up the opportunity to have a loan e-cycle instead:

“I was working part-time and I just needed some transport that was affordable and convenient. I was looking at buying a motorcycle initially and I thought I would give the e-bike a try first.”

During the loan

Charles used the e-cycle to get to work and to get around his local area. He found it *“brilliant, absolutely brilliant yeah, I was surprised at how easy it was”* and a *“great way to keep fit”*. He charged the e-cycle at home using a mobility-scooter charging point in his over 60s residential complex.

Opinion on the OTT loan scheme

Charles thought the loan scheme was really helpful in understanding the benefits of e-cycles, especially as he had not really thought about using one before. He would like to see the opportunity extended to more people.

Travel behaviour after the loan

Charles went on to buy a motorcycle after the loan period:

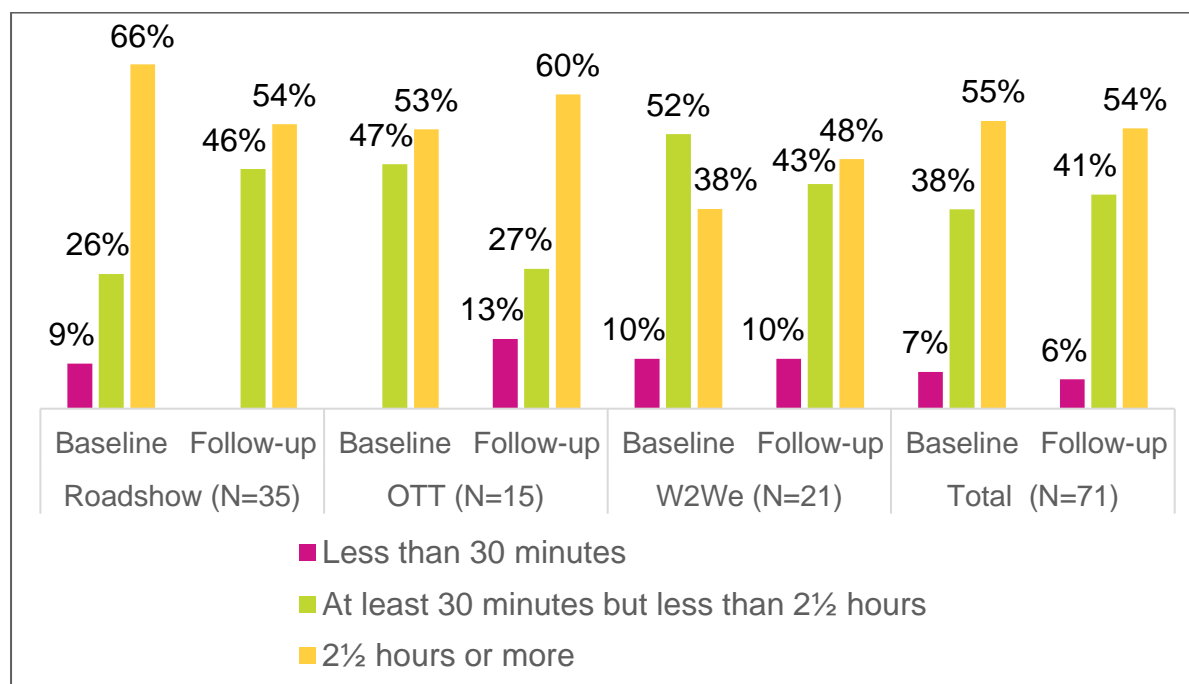
“When I looked at the cost of a motorbike and an e-cycle, I saw the motorbike was a better deal really because the cost difference is quite the deciding factor. I don’t get the benefits of exercise with a motorcycle but I can travel longer distances and it is more convenient. If I could afford to have them both, I would have both.”

Physical activity levels

Figure 36 shows pre- and post-intervention levels of moderate or vigorous physical activity for pilot participants who completed both baseline and follow-up surveys. There are no clear patterns with the data.

The percentage reporting at least 2 ½ hours or more moderate or vigorous activity in the last seven days has hardly changed, with a very small decrease from 55% (39 of 71) to 54% (38 of 71). Those reporting between 30 minutes and 2 ½ hours physical activity increased from 38% (27 of 71) to 41% (29 of 71). For participants in roadshows, there is a decrease from 65% (23 of 35) to 54% (19 of 35) doing physical exercise at least 2 ½ hours, while there is an increase in people doing less than 30 minutes or at least 30 minutes but less than 2 ½ hours. For OTT participants, there are mixed results. Finally, for W2We participants there was a net increase from 38% (8 of 21) exercising at least 2 ½ hours or more at baseline to 48% (10 of 21) in the follow-up surveys.

Figure 36. Comparison of physical activity levels (baseline and follow-up)⁵⁶

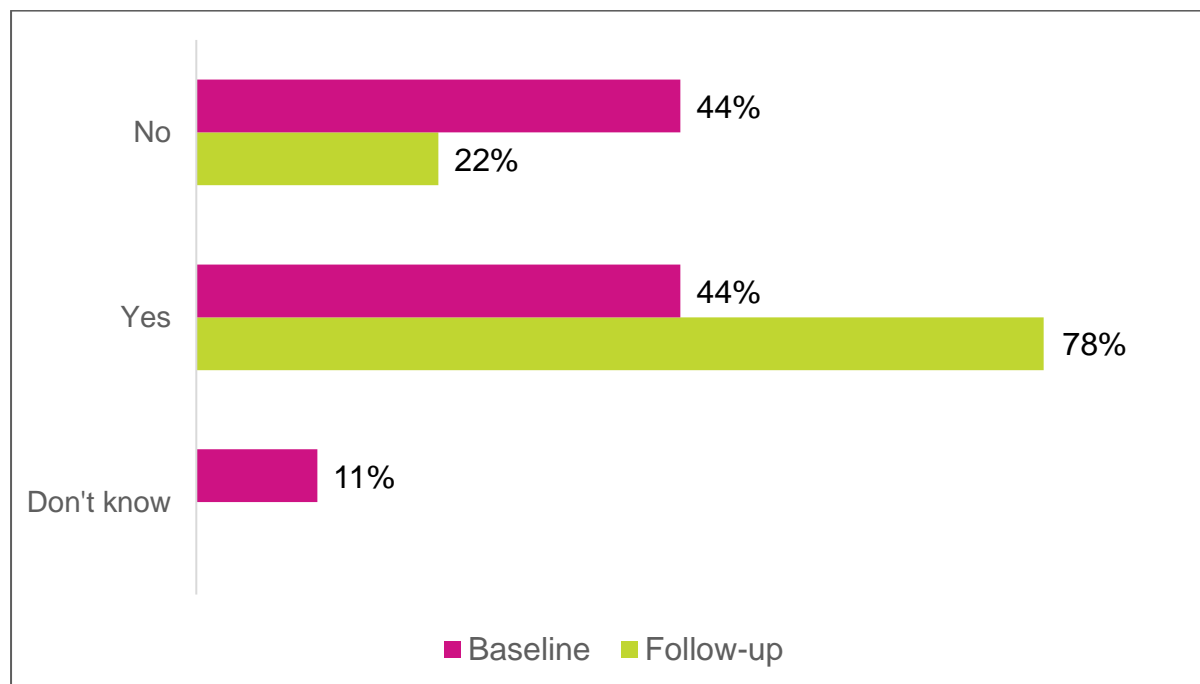


⁵⁶ Baseline and follow-up survey question: In the past week, how much moderate or vigorous physical activity have you undertaken in total? i.e. any activity which made you breathe faster.

Transport mode use

Figure 37 compares pre- and post-intervention expectations of roadshow participants with respect to replacing car trips with an e-cycle. In the baseline survey, 44% of participants (8 of 18) responded affirmatively, while in the follow-up survey this increased to 78% (14 of 18). With some roadshow participants known to have purchased e-cycles or participated in loan schemes, it can be suggested that these follow-up responses are no longer hypothetical but reflect realised changes in behaviour and mean that more car trips than initially expected have been replaced by the e-cycles. This indicates there is potential for e-cycles to replace some car trips but further evidence is required to understand whether behaviour change is sustained.

Figure 37. Expectation of replacing car trips by e-cycle (roadshow participants / baseline and follow-up / N=18)⁵⁷



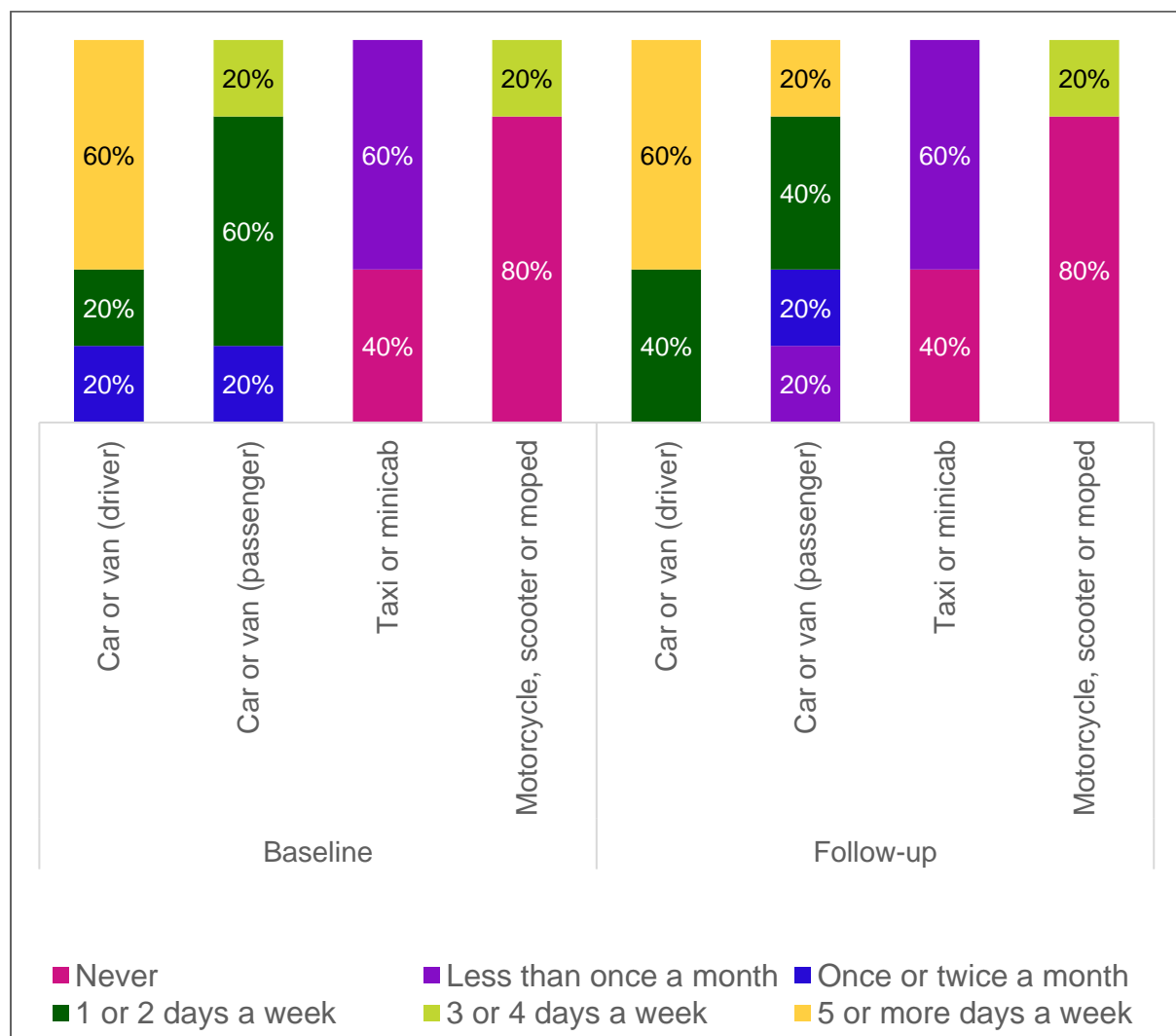
A comparison can be made between the transport modes used at baseline and follow-up for OTT and W2We participants who responded to both surveys. Figure 38 and Figure 39 show results for OTT participants.⁵⁸ Unfortunately, only five OTT participants gave full responses to both baseline and follow-up surveys and hence no clear pattern can be discerned.

⁵⁷ Baseline and follow-up survey question: If you owned an e-bike, or had one available to use, do you think you would cycle for any trips that you currently make by car?

⁵⁸ Only five participants have filled in the question for both baseline and follow-up surveys.

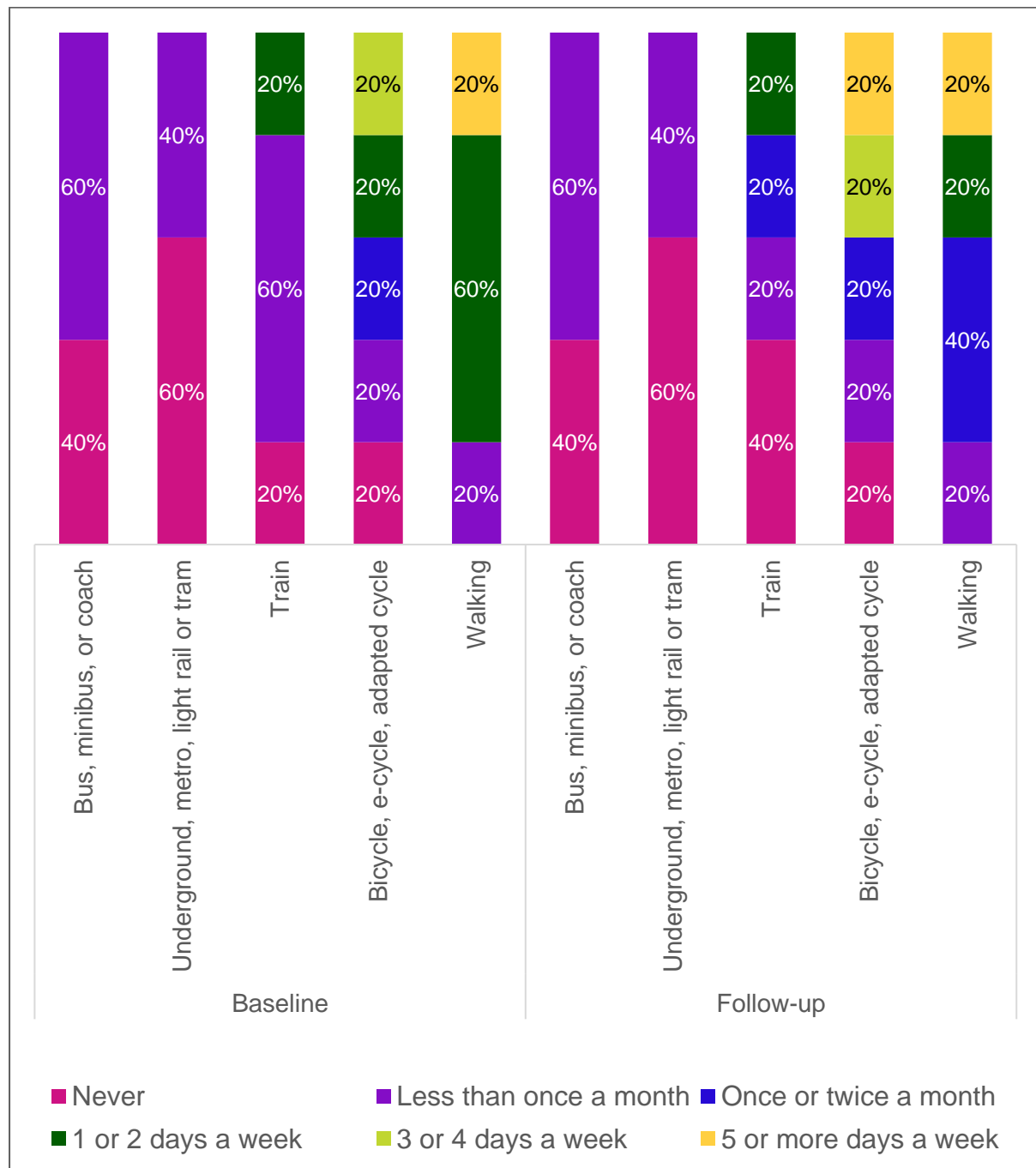
Figure 40 shows at baseline that 81% of W2We participants drove a car or van at least once a week (17 of 21) and 62% (13 of 21) were car or van passengers. Additionally, 62% walked at least once per week (13 of 21) and 20% used a bicycle, e-cycle or adapted cycle (4 of 21). At follow-up, there was little change in driving a car or van (86%, 18 of 21), car or van passengers (67%, 14 of 21) and walking (62%, 13 of 21). There was however a substantial increase in bicycle, e-cycle or adapted cycle use at least once per week (57%, 12 of 21) (see Figure 41). However, this is contradictory to the result reported for cycling frequency in Section A.4 where no increase was noted and shows caution is needed in interpreting travel behaviour results.

Figure 38. Comparison of use of personal motorised transport (OTT participants / baseline and follow-up / N=5)⁵⁹



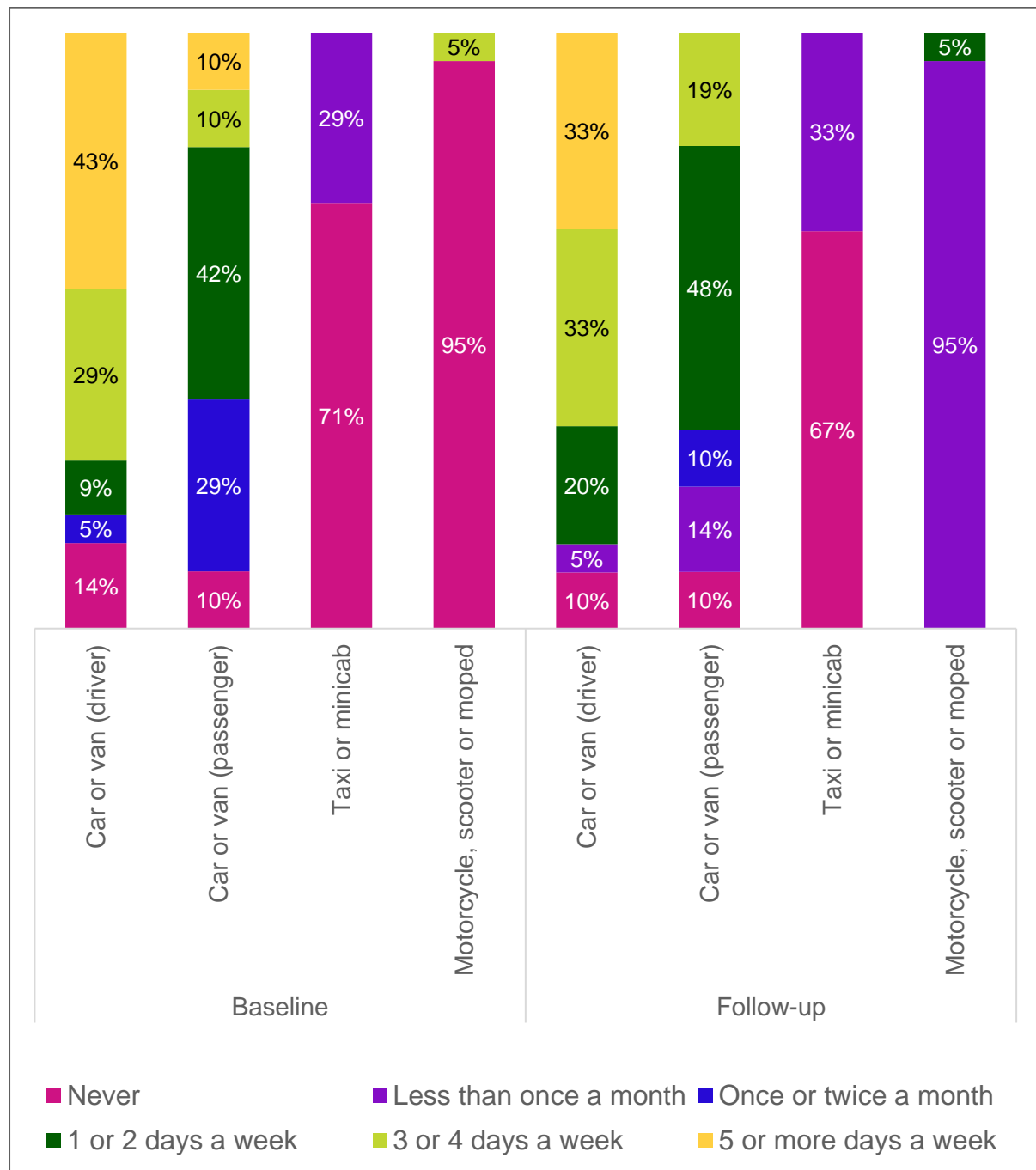
⁵⁹ Baseline and follow-up survey question: On average, how often would you say that you currently travel using each of the following? Please answer for each mode of travel.

Figure 39. Comparison of use of public transport and active mobility (OTT participants / baseline and follow-up / N=5)⁶⁰



⁶⁰ Baseline and follow-up survey question: On average, how often would you say that you currently travel using each of the following? Please answer for each mode of travel.

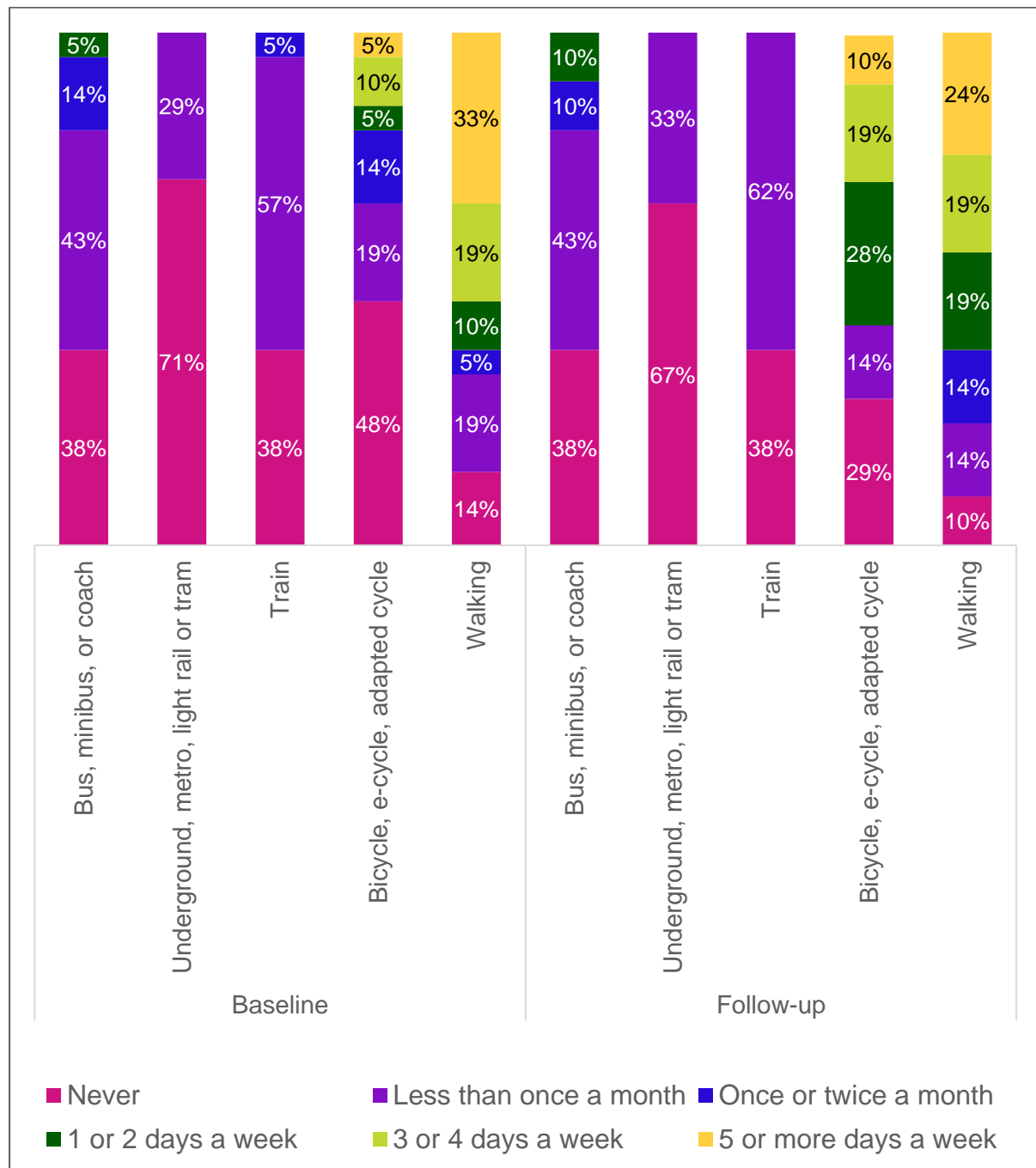
Figure 40. Comparison of use of personal motorised transport (W2We participants / baseline and follow-up / N=21)⁶¹



⁶¹ Baseline survey question: On average, how often would you say that you currently travel using each of the following? Please answer for each mode of travel.

Follow-up survey question: On average, how often would you say that you currently travel using each of the following? Please answer for each mode of travel.

Figure 41. Comparison of use of public transport and active mobility (W2We participants / baseline and follow-up / N=21)⁶²



⁶² Baseline survey question: On average, how often would you say that you currently travel using each of the following? Please answer for each mode of travel.

Follow-up survey question: On average, how often would you say that you currently travel using each of the following? Please answer for each mode of travel.

APPENDIX B. PHONE INTERVIEW PARTICIPANTS

Phone interviews were conducted with selected participants across the three interventions. Four interviews each with roadshow and OTT participants, and seven with W2We participants. Interviewees had opted-in via a question in the follow-up survey(s). A bias towards W2We reflected more people in W2We follow-up surveys who opted in, and because the OTT scheme had already furnished interviewees for the process evaluation exercise (see case studies in the practitioner report⁶³). Interview scripts broadly asked the same questions, tailored to the specific intervention and its potential consequences. Interviewees were selected based on responses in the follow-up surveys. For example, talking to people who had bought an e-cycle / and those that did not.

⁶³ Hiblin B., Chatterjee K., Shergold I. & Pantelaki, E. (2023). *Cornwall E-Cycle Pilot: Learning for Practitioners*. Report to Department for Transport

Table 7. Characteristics of phone interview participants

E-cycle scheme	Participant (pseudonym)	Age	Gender	Ethnicity	Occupation	Transport available	Income	Interest in acquiring own e-cycle
Roadshow	Emma	42	Female	White European	Full-time employment	3+ cars	£30k-£39k	Purchased an e-cycle
Roadshow	Rose	37	Female	Resident Cornwall	Full-time employment	2 cars	£50k+	Still considering buying e-cycle
Roadshow	William	47	Male	Resident Cornwall	Full-time employment	1 car	£50k+	Purchased an e-cycle
Roadshow	Gabriel	55	Male	Resident Cornwall	Full-time employment	2 cars	£30-£39k	Still considering purchasing an e-cycle
OTT	Charles	68	Male	Resident Cornwall	Part-time employment	1 car	Less than £10k before OTT loan, £10-£19k in follow-up	Keen to try an e-cycle, but after trial bought a motorbike to commute
OTT	Karen	51	Female	British/ resident Cornwall	Part-time employment	2 cars	£10k-£19k	Purchased an e-cycle
OTT	Elizabeth	55	Female	British/ resident Cornwall	Part-time employment	1 car in household, 1 moped / motorcycle	£10k-£19k	Wants to purchase an e-cycle but too expensive
OTT	Ellie	45	Female	British/ resident Cornwall	Part-time employment	3+ cars	£20k-£29k	Considers the e-cycle does not meet their needs - commute too long

W2We	Nancy	61	Female	British/ resident Cornwall	Part-time employment	3+ cars	£10k-£19k	Trying e-cycle as a response to health constraints on ordinary cycling
W2We	Georgia	37	Female	British/ resident Cornwall	Full-time employment	2 cars	£50k+	Trying an e-cycle to extend cycling (for all purposes)
W2We	Oliver	42	Male	British/ resident Cornwall	Full-time employment	2 cars	£40k-£49k	Looking to try an e-cycle for commuting to work
W2We	Sara	59	Female	British/ resident Cornwall	Part-time employment	1 car	£19k-£29k	Looking to an e-cycle to improve mobility (cost, health barriers)
W2We	James	64	Male	British/ resident Cornwall	Self-employed full-time employment	2 cars	less than £10k	Looking to use an e-cycle to improve personal mobility (cost, health barriers)
W2We	Edward	53	Male	British/ resident Cornwall	Self-employed part-time employment	2 cars	£10k-£19k	Wants to purchase an e-cycle but too expensive
W2We	Leon	52	Male	British/ resident Cornwall	Full-time employment	1 car	£20k-£29k	Purchased an e-cycle

APPENDIX C. RESEARCH INSTRUMENTS

C.1 Participant interview guide for W2We participants

Preamble (3 minutes)

- Introduce yourself, give reminder of what the W2We e-cycle loan scheme is and that it is part of a wider pilot, explain that DfT is evaluating the pilot to learn lessons for the national programme and other schemes.
- Explain the purpose of this interview is to learn about their individual experience of using the W2We loan e-cycle(s).
- Thank them for agreeing to take part, and for their signed Consent Form.
- Remind them that there are no right or wrong answers, ask them to be as open and honest as possible.
- Remind them that quotes, or opinions used in any write up will be anonymised, and that our research team is independent of DfT, Cornwall Council and Wheels 2 Work (W2W).
- Check the participant understands they are being recorded and that the recording will be deleted after write-up.
- Ask if they have any questions.

Life context (3 minutes)

To what extent has cycling featured through your life? Have you consistently had a bike and cycled or just at certain times in your life?

How has this been in the last five years?

Has there been anything significant or specific in this period that has affected your cycling for better or worse?

W2We loan scheme (12 minutes)

How did you first hear about the W2We e-cycles loan scheme?

How aware of the benefits and practicalities of e-cycles would you say you were at that time?

How easy was it for you to use the W2We loan e-cycle (e.g., charging, booking, safety equipment)?

Did any issues occur with the W2We loan e-cycle during the trial – for example related to bike maintenance, security or safety?

You said the W2We loan e-cycle enabled you to do one or more activities not previously possible (refer to questionnaire response). Please could you explain further how it made this/these possible? How are you managing to do these activities since returning the e-cycle?

You said you used the W2We loan e-cycle for other journeys (refer to questionnaire response). What was it about these types of trips that made you use the e-cycle?

You said you used the W2We loan e-cycle to replace journeys using other transport modes (refer to questionnaire response). What motivated you to use the e-cycle instead?

How easy did you find it to use the W2We loan e-cycle instead of these other ways of getting around?

What is your view of the benefits and practicalities of e-bikes now the loan is over?

Would you have liked the W2We loan scheme to have been over a longer period than three months? How long would have been helpful?

Personal purchase of an e-cycle (3-8 minutes)

If an e-cycle purchased personally (or otherwise acquired) during or after the W2WE loan scheme...

How did the W2WE loan scheme influence your decision to acquire an e-cycle?

What sort of journeys are you using the e-cycle for? (e.g., Work, Education, shopping etc.) What is it about these trips that makes you use the e-cycle?

Do you make journeys on the e-cycle that you previously made in other ways (bikes, bus, car, train)?

How easy do you find it to use the e-cycle instead of other ways of getting around?

What might encourage you to use the e-cycle for other activities / destinations?

What difference has acquiring your own e-cycle made to your life?

Have other members of your family, or in your social networks bought an e-cycle after seeing you purchase one? Are they considering it more seriously?

What changes have you needed to fit the e-cycle into your life / daily routines (e.g., storing it and charging it)?

If no e-cycle acquired...

Did the W2WE loan encourage you to think about acquiring an e-cycle at some time?

If you had an e-cycle, would you be able to make journeys that you don't do now, or make them in a different way (e.g., not having to use a car for example)?

What would need to change for you to be able to acquire an e-cycle?

E-cycles in general (3 minutes)

All participants...

Do you think an e-cycle is a good transport solution for people in your situation in Cornwall? If so, why?

Is there anything else you would like to say about e-cycles in Cornwall, or more generally, or about the W2We loan scheme?

C.2 Questionnaire content

Table 8. Content of baseline questionnaires

	ROADSHOW	OTT	W2W
CONSENT AND INTRODUCTION			
Consent question	X	X	X
What motivated you to try out an e-cycle today?	X		
Why were you interested in borrowing an e-cycle from the scheme?		X	X
Have you ever ridden an e-cycle before?		X	X
How long do you think is needed for people to get a proper feel for an e-cycle that they are borrowing?		X	X
CYCLING BEHAVIOURS			
Do you own or have use of any of the following? This could include vehicles that you own, loan, hire or use that belong to someone else.	X	X	X
On average, how often would you say that you currently travel using a bicycle, e-cycle, adapted cycle?	X	X	X
Have you made any cycle trips in the past seven days?	X	X	X
For the following three questions please enter numbers as answers. Please give your best estimates, or leave blank where this is not possible. In the past seven days, how many cycle trips have you made? In the past seven days, how many miles have you cycled? In the past seven days, how much time have you spent cycling?	X	X	X
CYCLING ATTITUDES			
Before today's activity/event, how safe did you feel cycling on roads in your local area?	X		
Before today's activity/event, how confident did you feel about cycling on roads in your local area?	X		
How safe do you feel cycling on roads in your local area?		X	X
How confident are you cycling on roads in your local area?		X	X

	ROADSHOW	OTT	W2W
Do you travel by bicycle, e-cycle or adapted cycle for any of the following reasons?	X	X	X
What type of journeys do you intend to use the loan e-cycle for?		X	X
How often do you think that you might use the loan e-cycle?		X	X
What mode(s) of transport will your new e-bike journeys replace?		X	X
ABOUT YOU			
Which year were you born?	X	X	X
What best describes your gender?	X	X	X
How would you describe your ethnic group?	X	X	X
Where is your main place of residence?	X	X	X
What is the postcode of your main residence in the United Kingdom?	X	X	X
Which of the following would you say best describes your current employment status?	X	X	X
What is your household's estimated annual income? i.e. the total before deducting tax or National Insurance.	X	X	X
On average, how often would you say that you currently travel using each of the following (please answer for each mode of travel): (a) car or van (as the driver), (b) car or van (as passenger), (c) bus, minibus, or coach, (c) underground, metro, light rail or tram, (d) train, (e) taxi or minicab, (f) motorcycle, scooter or moped, (g) bicycle, e-cycle, adapted cycle, (e) walk for at least 10 minutes as part of your journey.		X	X
In total, how many cars or vans are owned, or available for use, by members of your household?		X	X
In total, how many mopeds or motorbikes are owned, or available for use, by members of your household?		X	X
If you owned an e-bike, or had one available to use, do you think you would cycle for any trips that you currently make by car?	X		
In the past week, how much moderate or vigorous physical activity have you undertaken in total? i.e. any activity which made you breathe faster.	X	X	X

	ROADSHOW	OTT	W2W
Do you have any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?	X	X	X
Do any of your conditions or illnesses reduce your ability to carry out day-to-day activities?	X	X	X
CONTACT			
Would you be happy to be contacted about further research on this topic, conducted by, or on behalf of, the Department for Transport? Answering 'yes' does not commit you to taking part.	X	X	X
Please tell us your name.	X	X	X
What is your e-mail address?	X	X	X
FURTHER COMMENTS			
Do you have any further comments you wish to make about why you are interested in trying an e-cycle?	X		

Table 9. Content of follow-up questionnaires

	ROADSHOW	OTT	W2W
CONSENT AND INTRODUCTION			
Consent question	X	X	X
E-CYCLES			
Since the e-cycle try-out event, have you?: (a) purchased, obtained or upgraded an e-cycle, (b) borrowed or hired an e-cycle for an extended period, (c) purchased or upgraded a conventional bike, (c) none of the above.	X		
What sort of e-cycle did you acquire?	X		
Are you using your new cycle to make any trips that you previously made by car?	X		
Currently, are you still considering purchasing an e-cycle in the future?	X		
Since the e-cycle try-out event, has anyone else in your household? (a) purchased, obtained or upgraded an e-cycle, (b) borrowed or hired an e-cycle for an extended period, (c) purchased or upgraded a conventional bike, (d) none of the above	X		
Do you own or have use of any of the following? This could include vehicles that you own, loan, hire or use that belong to someone else [e.g. a family member or friend.]	X		
On average, how often would you say that you currently travel using a bicycle, e-cycle, or adapted cycle?	X		
Compared to the time of the try-out event, on average, are you <u>currently</u> cycling: (a) much more, (b) somewhat more, (c) about the same, (d) somewhat less, (e) much less, (f) don't know?	X		
Do you travel by bicycle, e-cycle or adapted cycle for any of the following reasons?	X		
Have you made any cycle trips in the past seven days (using any type of cycle)?	X	X	X
For the following three questions please enter numbers as answers. Please give your best estimates, or leave blank where this is not possible. In the past seven days, how many cycle trips have you made?	X	X	X

	ROADSHOW	OTT	W2W
In the past seven days, how many miles have you cycled?			
In the past seven days, how much time have you spent cycling?			
E-CYCLES LOANS			
How many e-cycles did your organisation or business borrow?		X	
How long did your organisation or business borrow an e-cycle or e-cycles for?		X	
What has happened since the e-cycle loan?		X	X
How frequently did you personally use an e-cycle borrowed through the scheme?		X	X
What type of journeys did you use the loan e-cycle for?		X	X
When you made journeys on the loan e-cycle, what other modes of transport did it replace?		X	X
Why were you personally interested in using an e-cycle borrowed through the scheme?		X	X
How long do you think is needed for people to get a proper feel for an e-cycle that they are borrowing?		X	X
Outside of the e-cycle loan scheme, do you own or have use of any of the following? This could include vehicles that you own, loan, hire or use that belong to someone else [e.g. a family member or friend.]		X	X
Aside from trips on the loan e-cycle, on average how often would you say that you currently travel on any type of bicycle?		X	X
How long did you borrow an e-cycle for?			X
What was the reason for your W2We loan?			X
How did the W2We loan e-cycle help you to make these journeys?			X
Aside from the trips on the W2We loan e-cycle do you travel by bicycle (of any type) for any of the following reasons?			X
CYCLING ATTITUDES			
How safe do you feel cycling on roads in your local area?	X	X	X
How confident do you feel about cycling on roads in your local area?	X	X	X
ABOUT YOU			

	ROADSHOW	OTT	W2W
Which of the following would you say best describes your current employment status?	X	X	X
What is your household's estimated annual income? i.e. the total before deducting tax or National Insurance.	X	X	X
On average, how often would you say that you currently travel using each of the following (please answer for each mode of travel): (a) car or van (as the driver), (b) car or van (as passenger), (c) bus, minibus, or coach, (c) underground, metro, light rail or tram, (d) train, (e) taxi or minicab, (f) motorcycle, scooter or moped, (g) bicycle, e-cycle, adapted cycle, (e) walk for at least 10 minutes as part of your journey.		X	X
In total, how many cars or vans are owned, or available for use, by members of your household?	X	X	X
In total, how many mopeds or motobikes are owned, or available for use, by members of your household?		X	X
In the past seven days, how much moderate or vigorous physical activity have you undertaken in total? i.e. any activity which made you breathe faster.	X	X	X
Do you have any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?	X	X	X
Do any of your conditions or illnesses reduce your ability to carry out day-to-day activities?	X	X	X
FURTHER COMMENTS			
Would you encourage others to attend a try-out event?	X		
Do you have any further comments you wish to make about e-cycles or the try-out events?	X		
CONTACT			
Would you be happy to be contacted for further research, for example a short phone interview, conducted by, or on behalf of, the Department for Transport? Answering 'yes' does not commit you to taking part.		X	X
Please enter your name below.			X
Please provide a contact e-mail address.		X	X