

Going Car Free: The Oxford Car Free Challenge

The motivations, benefits and
barriers for twelve drivers in Oxford
temporarily giving up their car

May 2024



Possible.

Inspiring climate action

Possible is a UK based climate charity working towards a zero carbon society, built by and for the people of the UK.

www.wearepossible.org



Low Carbon Oxford North (LCON) is a charity set up by local residents to support ambitious CO2 cuts through local action.

www.lcon.org.uk

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The Centre for Climate Change and Social Transformations (CAST) is a global hub for understanding the systemic and society-wide transformations that are required to address climate change.

www.cast.ac.uk

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Introduction



The majority of people across the UK are concerned about climate change¹ and strongly support wide-ranging action,^{2,3} including policies that reduce traffic and enable more people to walk, cycle and use public transport.^{4,5,6}

Transport makes up more than a quarter of the UK's emissions,⁷ with the largest contributor being cars.⁸ Unlike other sectors, there's been little or no progress in reducing our carbon emissions from transport since 1990.⁹ The number of cars owned by UK households is continuing to grow,¹⁰ and cars themselves are getting larger and heavier.¹¹ Meanwhile, modelling shows that we need to cut car miles across the UK by a minimum of 20% by 2030 if we're going to meet our climate targets – and by much more than this in towns and cities.¹²

The changes required in the way that we travel don't have to be a sacrifice. For the majority of people in UK cities and for society as a whole, enabling a wider variety of ways to travel is an opportunity. Action to enable more walking and cycling, and to make public transport more accessible, affordable and convenient, comes with huge benefits for our health, wellbeing, and the economy – as well as being very popular.

Oxfordshire's own strategy for reducing traffic is ambitious. It aims to radically reduce greenhouse gases, air pollution and congestion; and improve conditions for walking, cycling, and bus use, removing one in four car trips by 2030 and delivering

¹ Ipsos, One in four Britons think climate change is out of control (2023)

² Christian Bretter & Felix Schulz, Public support for decarbonization policies in the UK: exploring regional variations and policy instruments (2023)

³ Centre for Climate Action and Social Transformations, Catalysts of Change: People at the Heart of Climate Transformations (2024)

⁴ Department for Transport & Kantar, 'Public opinion survey on traffic and road use: general public research' (2020)

⁵ Guardian, Rishi Sunak's report finds low-traffic neighbourhoods work and are popular (2024)

⁶ Create Streets, 'Move Free' (2024)

⁷ UK Greenhouse Gas Emissions Final Figures: 2021 (2022)

⁸ UK transport and environment statistics: 2023 (2023)

⁹ Climate Change Committee, The Sixth Carbon Budget: Surface Transport (2020)

¹⁰ Statista, 'Number of licensed cars in the United Kingdom (UK) from 2000 and 2022' (2023)

¹¹ Transport & Environment, 'Cars are getting too big for British roads, new research shows' (2024)

¹² Possible, Briefing note – expert consensus that overall car traffic must fall rapidly to meet climate goals (2024)

a net zero transport network by 2040. The plan includes traffic filters within the city, which prioritise cycling, buses and essential car use, and are due to be implemented in Autumn 2024.¹³

¹³ Oxfordshire County Council, Central Oxfordshire Travel Plan (2023)

Summary



Possible's Going Car Free Challenge is an invitation to drivers to try getting around without their car for a few weeks. It was first run as a research project with ten participants in Birmingham, Bristol, Leeds and London in January 2022. It was followed by a public Going Car Free Challenge in July 2022, in which 1,000 drivers around the UK participated.

In partnership with Low Carbon Oxford North (LCON) and the Centre for Climate Action and Social Transformations (CAST), we brought the challenge to Oxford in March 2024. Twelve drivers from across the city, from a range of backgrounds and locations, temporarily gave up their cars to challenge themselves, inspire others to try reducing their car use, and highlight the barriers to sustainable travel in Oxford.

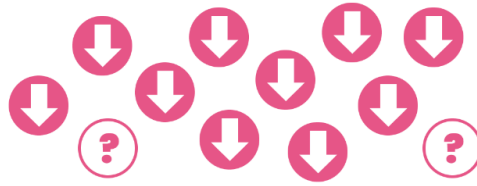
The majority of participants really enjoyed the challenge, and almost all are planning to reduce their car use in the long term as a result. Several have made, or are considering making, even more significant lifestyle changes, like getting their own bike or giving up their car permanently.

Aims of the research

Possible, Low Carbon Oxford North and the Centre for Climate Action and Social Transformations worked closely with the participants throughout to assess:

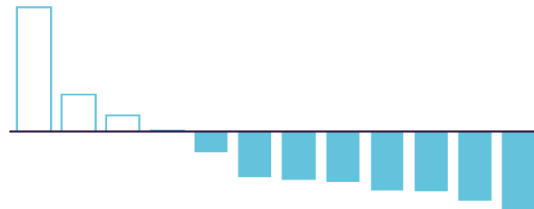
- Their motivations for reducing their car use and applying for the challenge.
- The changes they would need to make to do so.
- Their experiences of trying to go car-free, including the barriers and personal benefits.
- The impact of the challenge on participants' travel time and transport emissions.
- What support was helpful in encouraging and enabling participants to go car-free.
- Their longer term plans once the challenge had finished.

10 out of 12 participants are planning to reduce their car use



Three out of 12 are planning to make a significant lifestyle change, such as giving up their car

Most participants cut their CO2 emissions from transport by at least 50% - with some almost eliminating their emissions entirely



10/10

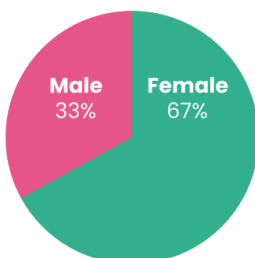
When asked "To what extent would you recommend taking part in the Car Free Challenge?" the average answer was 10/10

Average amount spent on car ownership and use per year among participants

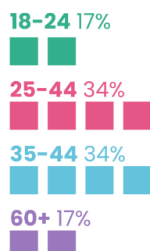
£3,568

Demographics of participants

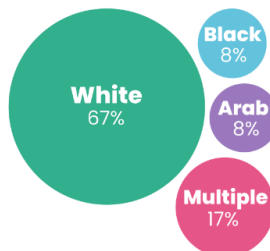
Gender



Age



Ethnicity



Children



Disability or chronic health condition



Methodology

The twelve participants were recruited in January 2024 through a combination of social and digital media, and word of mouth. Oxford residents were reached through Possible and Low Carbon Oxford North's mailing lists and social media followings, as well as through an interview on BBC Radio Oxford and by reaching out to hospitals, schools and places of worship.

The participants were chosen to ensure that they included a range of people with different backgrounds, identities and personal circumstances, according to sample frame criteria that covered gender, age, ethnicity, religion, disability, long term health conditions, childcare and caring responsibilities, types of employment, and location.

Participants completed a survey before the start of the challenge, which asked about their motivations for participation, their typical driving behaviour, and details of their primary vehicle, as well as their impressions of different sustainable transport modes according to a range of parameters like safety, accessibility, convenience and cost. In the first week of the challenge, participants took part in an interview conducted by CAST researchers. All participants filled out a second survey, and nine took part in a second interview two weeks after the challenge had finished to assess what had changed.

Participants kept detailed records of their journeys for one week before the start of the challenge to obtain a baseline of their typical travel behaviour. During the three weeks of the challenge, participants continued to keep detailed records of their journeys, and tried out different methods of travel in order to avoid using their personal car. Their journeys in these two phases were compared, to understand changes in their travel.

Participants were paid £150, to remunerate the time they spent taking part in interviews and briefings, and filling out their journey logs each day. They were all offered free cycle training before the challenge began, and their local travel expenses for their car free weeks were reimbursed.

They were supported throughout the challenge by LCON project officers, who were available to offer one-to-one support and guidance. They were provided with additional information about the options available to them, including a briefing pack with details and tips for walking, cycling, using public transport and trying car clubs or car sharing. They had access to cycle hire, cycle repair, and complementary cycle

insurance and car club membership. Participants and staff working on the project were brought together as a group for a briefing before the challenge, and a debrief after it had finished.

Profile of participants

#	Gender	Age	Ethnicity	Disabled and/or long-term health condition	Children
1	Female	18-24	White or White British	No	No
2	Female	35-44	Arab	Yes	School age
3	Male	25-34	White or White British	No	No
4	Male	55-64	White or White British	No	School age
5	Female	35-44	Black, African, Caribbean or Black British	No	School age
6	Male	35-44	White or White British	No	School age
7	Female	25-34	White or White British	No	No
8	Female	35-44	Mixed or multiple ethnic groups	Yes	School age & preschool age
9	Male	25-34	White or White British	No	No
10	Female	25-34	Mixed or multiple ethnic groups	Yes	No
11	Female	65-74	White or White British	No	No
12	Female	18-24	White or White British	No	No

Why were people interested in going car free?



Motivations for trying to go car free

There were a range of motivations for trying to go car free, the majority of which were shared by multiple participants. Some motivations were based on improvements people wanted to make in their personal lives, such as getting more exercise, feeling less stressed, saving time, or cutting the cost of travel. Other motivations were related to wider societal views, like seeing the need to reduce congestion across the city, tackle air pollution, or address climate change. Sometimes, these were connected, such as parents who were worried about the impact of air pollution on their children, and wanted to be part of a positive change on a wider scale as a result.

Health and wellbeing were the most popular reasons for driving less

The most mentioned motivation across the twelve participants was the health and wellbeing benefits they believed they would see from taking part in the challenge. The effects were seen as coming from two different changes:

1. Spending less time in the car, which was seen as a source of stress in itself.
2. Getting more exercise and movement from walking and cycling more.

"If I'm in the car, I'm showing up to work, I'm stressed, I'm thinking about transport, I'm thinking about this car that's just cut me up on the A34, you know, these types of things"

"Walking more, getting steps in, just moving my body more is definitely a motivation"

Climate change and the environment were high in some people's minds

Climate change was the second most mentioned motivation for people wanting to reduce their car use, and for a number of participants this was their main motivation. Most people felt that giving up their car for three weeks would be good for the environment, suggesting that they understood the role of cars in contributing to climate change. One or two people

weren't confident that making the change would make much difference - as they felt the effects of a single person's actions would only be small. However, these people recognised that by doing the challenge they might spark conversations or inspire others to try going car free too, and thus be part of a bigger movement for change.

"Having had children and, and realising what's happening with the world heating up and last summer being so hot... I think all of those things are starting to meet a bit more as one."

Congestion was impacting some people's everyday lives: this was connected to feelings and beliefs about both wellbeing and the environment

A number of participants talked about the amount of congestion they saw in Oxford, which they referred to as "awful" and "horrible". Several people talked about how stressed it made them feel, whether they were in their car sitting in traffic, or outside their car witnessing it. Generally, there was a feeling that something had to be done and that they wanted to be part of the solution.

"The problem of cars in terms of pollution, in terms of congestion, is becoming so big"

Some people were curious about saving on their transport costs

Several people were curious about whether they could save money by taking part in the challenge. They recognised that their car costs a significant amount of money, from the initial purchase to ongoing costs like insurance and fuel. At the same time, for those who would be relying on public transport, they weren't necessarily confident before doing the challenge that this would be cheaper overall.

Only one person said that the financial incentive of doing the challenge had been a significant motivation to take part in the challenge. The financial incentive involved a £150 payment for taking part, as well as having their sustainable travel expenses covered for the duration of the challenge.

"In an ideal world, I wouldn't want to use my car because it costs me quite a lot of money"

Negative expectations and perceived barriers around going car free

Car driving was a habit

For all of our participants, driving was a long-term habit. Many of them learnt to drive at 17 or 18 years old, and some had been driving for decades. A number of people had learnt to drive growing up in rural areas, where they were reliant on a car from a young age. These participants had brought the habit of driving with them when they moved to Oxford, despite the very different geography and services available.

The prospect of trying something new was enticing because of the health, environmental, and financial benefits they thought the challenge would bring. However, going car-free for three weeks was seen as a genuine challenge by most participants. Participants varied in how confident they were about going car free and how easy they thought this would be.

Accessibility was a concern, especially for people with disabilities, reduced mobility or those travelling with young children

Some participants, who had reduced mobility or were regularly travelling with young children, were worried about the ease and accessibility of other transport options. This was a significant factor for them in considering what options would still be available to them without their car.

For one person with reduced mobility, the challenge was an opportunity to raise awareness of the accessibility issues faced by Disabled people, and ensure that these were highlighted to local policymakers going forward. They reported that their family and friends were worried about their personal safety when going car-free, because they thought there was a higher risk of trips and falls when using other transport options.

"I just feel that, you know, once you've broken your ankle, or whatever else [...] it's such a hassle. I just don't want what I feel is going to put me at any risk. Because life is good and interesting at the moment, and I don't want to mess it up."

Convenience and 'carriability'

The most mentioned barrier to going car free was the belief that there would be a loss of convenience and 'carriability', i.e., that journeys would take longer and would be less

convenient or even impossible when having to carry heavy items. Several participants specifically said that grocery shopping would be the most difficult journey to do without a car. Participants were worried about not being able to carry their shopping as easily when walking, cycling or using public transport. They also thought shopping could be more expensive, if they became reliant upon local shops instead of cheaper out of town supermarkets such as Lidl and Aldi.

“Going to the supermarket, doing a big shop, maybe going to the garden centre... that requires a bit of a, a rejig in my mind of how I would travel”

There were concerns about personal safety when walking and cycling

Some people were concerned about their personal safety and how it would change when they were out and about walking and cycling. In particular, some women were worried about walking home at night after dark. They felt that they would need to consider their travel routes in advance, especially to avoid streets with insufficient street lighting.

Participants who cycled expressed concerns about their safety in traffic. This concern was heightened by collisions people had heard about in the area. A number of participants were very experienced cyclists, but most weren't. Other people weren't planning on trying cycling during the challenge at all. A number of participants were initially interested in cycling, but the timeframe of the project didn't allow them to gain the skills and experience required to cycle confidently during the challenge.

Disabled participants with reduced mobility expressed concerns about personal injury when using buses, trains and pavements.

“I'll be a lot more wary after the late shift of walking back on my own. Whereas normally if I was in my car, I wouldn't even give a second thought to what way I would go... So I need to think about what route I'm going to walk, are there street lights that way?”

Post challenge outcomes – qualitative



Experiences of the challenge depended on participants' circumstances, and the car free options they tried. However, most people had a very positive experience, and many said

that they found the challenge surprisingly easy. Almost all the participants said that they had enjoyed the challenge, and reported some positive effects on their lifestyle as a result of taking part. One person, who had reduced mobility, found the challenge very difficult, and reported that the challenge had had a negative impact on their work, wellbeing and social life.

Notable findings

Health and wellbeing

The challenge had a positive impact on the health and wellbeing of the majority of participants. Some people reported feeling that they were in a better mood, their mental health was better, or that they had more 'headspace' to think and reflect on life. Several participants spent more time socialising, which also improved their mood and mental wellbeing.

A number of participants reported better physical health too. One person told us that they had lost weight, which they had wanted to do. Another person told us that they became fitter and stronger from cycling. Two participants, who were already active runners or cyclists, ran and cycled more during the challenge.

Parents said that their children had enjoyed the challenge. One mentioned that their children were happier, more focused, and more relaxed. They felt this was the result of having more opportunities to play and spend time together outdoors during the challenge.

Physical ability played a significant role in the enjoyment of the challenge. A participant with reduced mobility reported that the challenge had had a negative impact on their wellbeing. The participant felt frustrated, isolated and less productive at work because of reduced flexibility. Taking the bus took up much more of their time and energy than using their car had done.

"My children are more excited about this experience because [...] we walk so much and they stop in the parks to play. We cycle a lot, like these last two weeks. We cycled, we repaired our bikes. My children are, like, enjoying this challenge even more than me. So, their motivation is making me motivated as well. Their happiness is motivating me"

Traffic and congestion

"It's good for mental health. Instead of driving home and sitting in traffic for 20 minutes, getting more annoyed. I can

walk home and it might take an hour, but I listened to an audio book whilst I'm walking and I get home. I feel really Zen. I feel great."

A number of participants had expected that their wellbeing would improve once they had stopped using their car, and they were right. Participants said that they had felt less stressed and more peaceful when not using their car. Part of this came from the knowledge that they weren't contributing to traffic. They also felt good about the fact that they were not contributing to congestion in Oxford, and making the problem even worse. One person reflected on the need to keep the roads clearer for those who really need to use them, like the emergency services, and felt relieved that they were able to be part of this.

"So I find it a lot nicer to not have to be focused on driving. And also, you know, your stress levels go up with traffic."

Climate change and the environment

Participants felt good about the impact they were having on the environment through choosing not to use their car. The challenge had provided a supportive space in which they could try out a more sustainable approach. Some wished they could have done more, but felt that it wasn't practically possible because of their personal circumstances.

"I'd certainly think that if the public transport was cheaper, and efficient, reliable, then that would make a huge difference to people's attitude. It really would because most people want to save the climate, you know, nobody's out there to make it worse."

Money and transport costs

Several participants told us that they had saved money during the challenge. The challenge made them aware of how much they were spending on their car on a weekly or annual basis. Although no-one reported spending more during the challenge, several participants felt that public transport needed to be cheaper in general. One participant wondered whether they were spending more on train tickets than on using their car, but they recognised that this only compared tickets against the fuel costs, and did not include all the upfront costs and annual charges (such as insurance) they paid for their car.

"I put my car in for a major service and it was an 800 pounds whopping bill, which was a good way to put me off driving... So I think that being car-free, and using Co Wheels and using

taxis would actually probably be cheaper than running the car."

Nature and local environment

Temporarily giving up their car gave participants more ability to appreciate Oxford, including their sense of connection with nature, the physical surroundings of the city, and the weather.

"It's a really beautiful city. It's really busy. The buildings are beautiful. There's cafes, restaurants, so much, you know, so many lovely things. And I think the past like six months with it being winter as well, I just don't appreciate where I live and I walked home on Tuesday evening and I walked home through the park and I was able to see like all of the bulbs coming up. I got to see loads of dogs, like, you know, it was great walking back."

Relationships and social connections

A number of people noted different ways in which the challenge had impacted the experiences and interactions that they had with other people. In particular, they felt more connected with others and they had more social experiences when they weren't using their car.

One participant, who had recently moved to the UK, made new friends and got to know new neighbours and colleagues that she had not really spoken to before. Another participant, who took the same bus to work as some of their colleagues, enjoyed the opportunity to chat during the commute. They even managed to get some meetings done on the bus, which saved them time later in the day. Another participant used their lone walks to call their family. Parents noted that they had more quality time to spend with their children when doing journeys together.

The 'sunk costs' of car ownership

Because participants were already paying annual charges such as purchase costs, insurance and VED, train tickets often appeared to be more expensive than driving because these upfront costs weren't being factored in. This discouraged some people from using the train for more journeys, as not using their car then felt like a waste of money.

"Because I've already paid all that upfront, I feel like that's why I should use the car because I've already taxed it for the whole year now and insured it. I'm like, if I don't use it, it's almost a waste of money. Um, so I think you kind of, once you

get the car and you get into that cycle of paying, it's kind of hard to get out of it because not using it then feels like, like a waste of money or like you're not making the most of it."

Accessibility

Before the challenge, some people had anticipated issues with the accessibility of car free options during the challenge, and in some cases this proved to be correct. One participant with reduced mobility tried to use buses for their commute, but found them slow, unreliable and frustrating. This had a significant impact on their wellbeing. They felt more socially isolated, less productive and more frustrated overall. A particular issue that they noticed was that the floors of local buses were slippery, which made them feel unsafe using mobility aids. Another participant was worried about breaking their ankle while out and about.

"I don't think that many people who have mobility issues would have been volunteering for the trial. And I think that's something that, um, whoever's making policies about travel really needs to have at the forefront of their minds."

Convenience and flexibility

One of the most notable changes to people's routines and lifestyles during the challenge was that they found themselves having to plan more.

This was particularly an issue for people relying on buses, and especially in the mornings while trying to get out of the house for work. The pressure of having to catch the bus to avoid being late added time and stress to the morning commute.

Generally, participants only had to plan a bit more in advance. Some participants felt that this was relatively easy. For example, some people went to local shops, rather than out of town supermarkets. Other participants did smaller food shops throughout the week rather than doing one big food shop once a week.

Getting to after-school activities outside town proved to be a real challenge for some participants and in fact, the hardest part of the whole challenge. Several parents found themselves taking taxis to after school activities because there were no buses or safe cycle routes to where they needed to go with their children. They reflected on the need to either provide reliable bus services and safe cycle routes to out-of-town activities; or to ensure that these activities were

available in a wider variety of neighbourhoods, reducing the need for families to travel.

What helped people take on the challenge?

Participants were given a range of offers and types of support that helped them work out alternatives to all of the journeys they would usually do by car.

This included detailed information about the alternatives available locally; support from LCON’s project officers; a free cycle training session; and weekly reminder emails about the challenge.

After the challenge, participants rated what types of support had been most helpful to them in their attempts to go car free. Their ratings show the importance of a range of types of support, from structured challenges, to easy-to-access information, to practical support such as cycle training or a bike service, to financial support such as reducing the cost of more sustainable options.

Most helpful resources

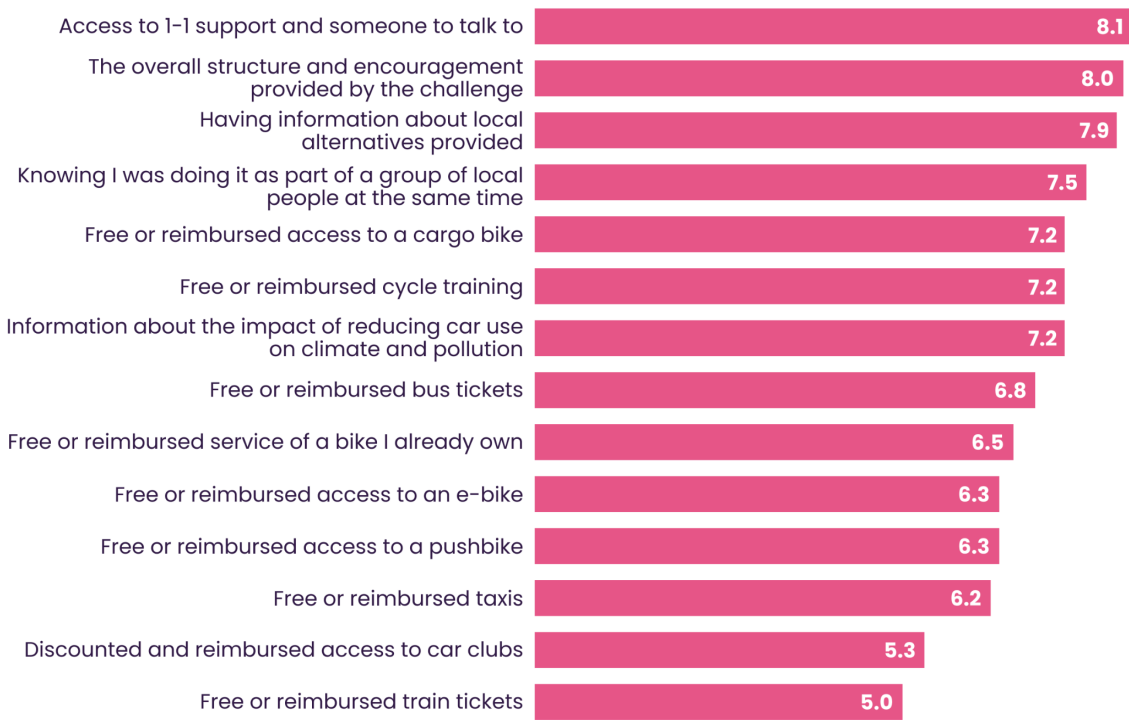


Fig 1: Resources listed as most helpful by trial participants

Cycle training

Several participants, who were inexperienced cyclists or had never cycled before, were interested in training, but wouldn’t have been able to become confident about cycling within the

timeframe of the project. These participants still took on the challenge, but chose to rely on walking and buses.

How people felt about different car free modes after the challenge

All participants found different ways of adapting to life without a car for some, if not all, of their journeys. With the support of LCON project officers, each person worked out their own approach depending on their circumstances, skills and preferences.

For example, a number of participants who had had bad experiences in the past were particularly nervous about cycling or using e-scooters. Some participants were not able to cycle, and therefore had to walk or rely on buses and taxis. Some people really wanted to cycle more, and the structure of the challenge helped to motivate a number of participants to take up cycling, or cycle more.

Walking was popular and great for people's moods

Participants who walked more really enjoyed it. Some of them felt that it afforded them with headspace which helped to improve their mood and mental wellbeing. However, walking was of course slower, and restricted how far participants could travel.

Some people fell in love with cycling

Some participants knew how to cycle, but had fallen out of the habit, while others wanted to increase how many journeys they were doing on their bike. Multiple participants were surprised and impressed by how capable they were of cycling in the city.

At the same time, cycling was not an option for all participants, because they were not physically able, had never learnt to cycle, or did not feel that there were safe routes.

People who relied on buses had mixed experiences

"I had to persuade my colleagues to walk because the bus wasn't coming. Sometimes when you wait for the bus, my colleagues said the bus can say, 'it will come in five minutes'. Five minutes would be like 10 minutes. 10 minutes would be like 20 minutes."

"There was a couple of mornings where the bus didn't show up... If you then have that kind of loss of reliance on the public transport, that can really knock your confidence, knock your reliance on it."

Buses in and out of the city were a good option for some participants, who found them relaxing and sociable. However, buses were also found to be unreliable. Participants noted that buses did not turn up when they were supposed to, causing delays to their work days or other activities. Some participants were not confident about using buses, due to lack of personal space or practical issues such as having to travel with children in a pram. Some people felt restricted by having to rely on a bus time timetable. One person had had a previous bad experience when trying to get on a bus with a pram.

Available bus routes were a significant factor in some people's decision making. For example, where there was no direct bus route, some participants were more likely to need to rely on a car or taxi. Several people noted that while buses in and out of the city centre were often good, bus routes between out-of-town destinations were lacking.

"The bus routes in Oxford all go into the city centre and then out of the city centre. It's very difficult for me to do a lot of the journeys that I do on one bus, so I think the bus network needs to get better, and be more reliable and predictable than it is."

Trains were good for longer distance journeys, but were expensive

Some of the participants took trips out of Oxford during the challenge, including taking trains or driving to London, Cornwall or other places in Oxfordshire. Generally, they felt that the train was fast and convenient, but it was also expensive. Because of the sunk costs of car ownership, and because trains do not always go from A to B, driving was particularly attractive for these longer journeys out of the city.

For example, one family used their car during the challenge because it did not seem feasible to travel with two children and luggage to visit family in Oxfordshire. Another person drove to Durham, because the train journey was too expensive and inconvenient.

Taxis played a important role when people couldn't walk or cycle, or there wasn't a direct bus route

Several participants used taxis during the challenge when other options were not available. This included getting out of town to children's activities. However, this was partly because participants' travel expenses were covered during the challenge, and they may not have been able to afford to do this in day-to-day life outside the challenge. At the same time, one or two participants noted that occasionally using taxis or car clubs could be more economical overall than owning and maintaining their own car.

Car sharing and car clubs helped for occasional journeys

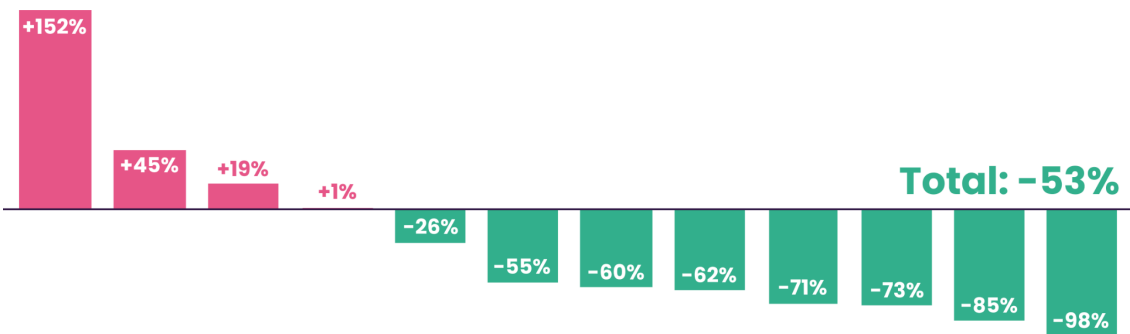
Some participants shared a car with friends or family, or tried out a car sharing scheme such as Co Wheels or Zipcar. Informal journey sharing was occasionally useful for getting to work or social events together.

Post challenge outcomes – quantitative

Big carbon savings

Across the group as a whole, total CO2e emissions, and emissions per kilometre travelled, fell significantly during the challenge.

Most participants reduced their transport emissions...



...and their CO2e per km travelled

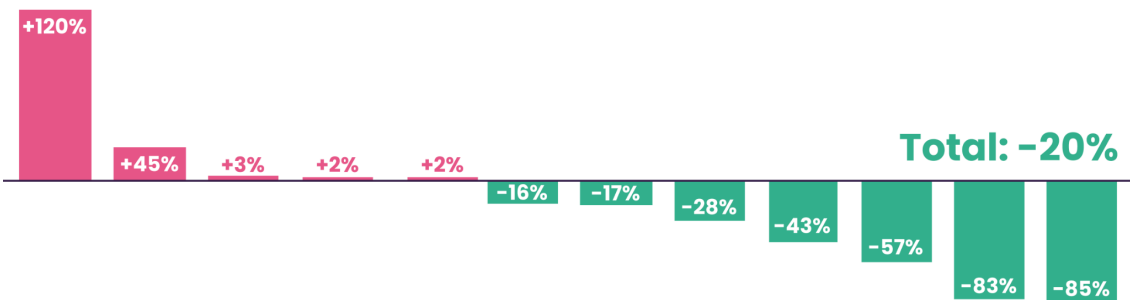


Fig 2. Change in transport emissions and CO2 per km travelled during the trial

Some individuals’ total emissions appeared to rise in their car free weeks. This can be explained by a number of factors:

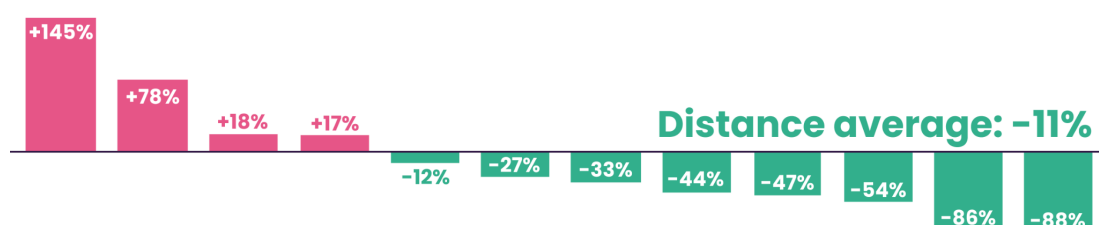
- **Behaviour change in the baseline week:** comparing some participants’ reported behaviour in their application form (January) with their baseline travel logs (late February) suggests that they had already started to reduce their car journeys before their car free weeks.
- **Travelling more trips per week:** some people’s total emissions have gone up because they simply travelled much more per week, with their emissions per kilometre showing either little to no change, or a reduction.

- **Having to use taxis or cars in some cases:** some participants had to take taxis for journeys out of town where there were no bus routes or cycling wasn't an option. Government figures used in our analysis¹⁴ show that emissions per kilometre are higher for taxis than cars due to the amount of time they spend seeking fares, making these journeys more polluting.

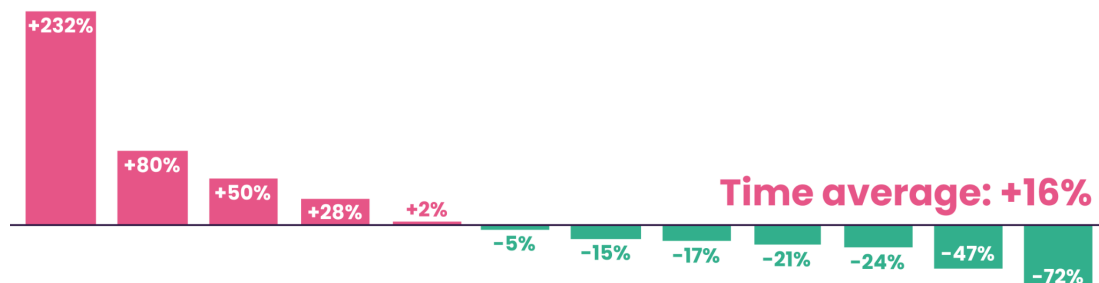
Individual variances are very much to be expected in a trial with a small sample size such as this, and it's worth noting that across the group as a whole, total emissions and emissions per kilometre fell by 53.3% and 19.7% respectively during the challenge.

Distance, time and speed

Most participants reduced their distance travelled



Some spent more time travelling, some less



Most participants travelled slightly more slowly

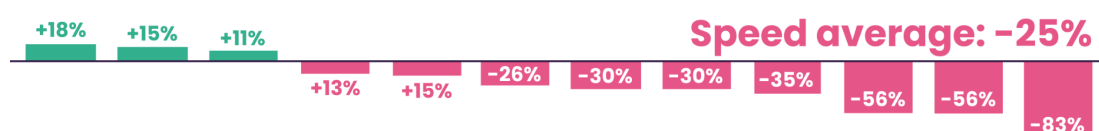


Fig 3. Change in distance, time and speed during the challenge.

Less than half the participants travelled further during their car free weeks than they had done previously, while the others travelled less. Similarly, around half spent more time travelling than previously, while around half spent less time travelling. Most travelled slightly more slowly during the car free weeks.

¹⁴ Gov.uk, [Greenhouse gas reporting conversion factors 2023](#)

How participants shifted their journeys

Half of the participants in the challenge were able to complete it without taking a single car journey, while ten out of twelve were able to reduce their kilometres travelled by car by 80% or more. There was a huge shift towards cycling in particular, with kilometres travelled by bike going up by 140%; while kilometres walked also went up dramatically, by 108%. Participants able to walk or cycle more of their journeys reported significant wellbeing benefits, highlighting the need to enable even more people to walk and cycle safely and conveniently.

All participants dramatically reduced their car kilometres

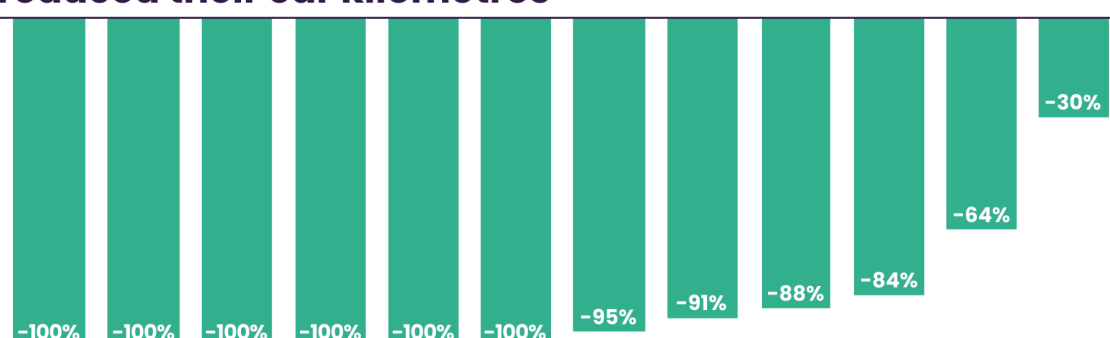


Fig 4. Change in car kilometres travelled during the challenge



Fig 5. Percentage change in car, walk/wheel and cycle kilometres

Financial savings

We did not collect data to determine whether participants saved money during their car free weeks, compared to what they would have spent if they had been travelling by car as normal. Analysis of participants' reported car costs, however, suggest that most participants spent thousands of pounds each year on their car, with the average cost being more than £3,500 per person each year and several people spending more than £5,000 per year.

On average across the group of participants, this included £1,012 on fuel, £628 on insurance, £415 on maintenance, and £125 on VED, as well as £1,300 on purchase costs or payments per year of ownership.

This was also described by some participants as ‘sunk costs’ that had the effect of trapping them in a cycle of driving: because they had paid for a car, they felt they should use it.

Participant’s annual car costs ranged from £1,000 to almost £7,000

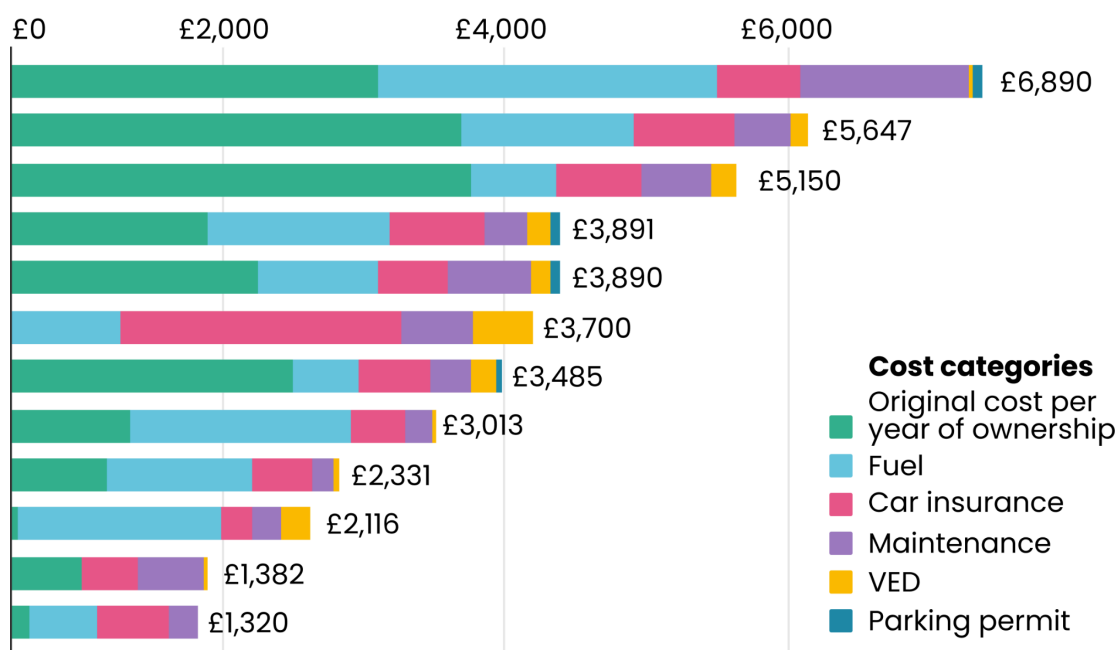


Fig 6. Participants’ annual car costs

Participants’ post challenge plans

After the challenge, ten out of the twelve participants said they were going to continue to drive less than they had done before the challenge.

A number of participants have made or are planning to make even more significant lifestyle changes. One person gave up their car in the weeks after the challenge, triggered by their car failing its MOT and having realised during the challenge that they did not need it. Another participant is considering giving up their car when its next MOT is due. A further participant used their payment from the challenge to buy their own bike (they had hired one during the challenge).

For one participant, who had reduced mobility, using their car less was not possible in the long term, and they were planning to continue using their car as much as they had done before the challenge.

Conclusions



We had a variety of participants with different lifestyles and circumstances, who showed how it can be possible for a diverse group of people to reduce their reliance on cars, and bring about significant reductions in their emissions.

The positives

The majority of people who took part in the challenge had a positive experience, and a number of people were surprised at how easy they found the challenge. Most participants who took part in an interview after the challenge concluded that it was possible for them to travel around the city without a car.

Most participants intended to continue with reductions in car use at the end of the challenge, and three planned to make a lifestyle shift such as giving up their car or getting their own bike.

There was a significant reduction in emissions across the group, with total transport emissions and emissions per kilometre falling by 53.3% and 19.7% respectively during the challenge.

It wasn't only the participants themselves who were positively impacted by the challenge. Some told us it had sparked conversations with friends, family or colleagues, and some were looking for ways to make changes on a slightly bigger scale, e.g. at their workplace.

The major positive impacts participants felt were:

- Improved physical health (e.g. improved fitness, weight loss)
- Improved mental health (e.g. feeling less stressed, having more 'headspace' or time to reflect)
- Feeling good about avoiding or not contributing to traffic and congestion
- Improved relationship dynamics (e.g. having fun with children, quality time with family, and getting to know neighbours or colleagues better)
- Getting around quicker (e.g. reducing commute times by avoiding traffic)

- Exceeding expectations of self (e.g. being surprised at how capable they were of walking or cycling)
- Feeling more connected to their surroundings (e.g. becoming more aware of the city, nature, and the weather)

The negatives

While most people had a positive experience, the project also highlighted important barriers to sustainable travel.

For example, a participant with mobility difficulties, who navigated the challenge using crutches, found the experience slow, tiring and limiting. Another participant loved cycling on their own, but found it hard to switch journeys with young children. This points to the importance of making public transport fully accessible, and ensuring exemptions to driving restrictions are in place for those who have to rely on their cars.

A number of people found it difficult to rely on buses because they didn't always run as scheduled, they took longer than the equivalent journey by car, or because of a lack of routes connecting destinations on different sides of the city or serving edge of town destinations. . These issues point to the importance of bus priority measures in achieving more reliable bus services, and of ensuring buses are accessible and affordable. They also emphasise the value of good local amenities, such as children's activities, in reducing the need to travel to out-of-town locations.

People cycling during the challenge highlighted safety concerns, including from their family and friends, in some cases because of previous collisions in the area. This highlights the need for more dedicated, well-maintained cycle routes free from traffic. It also underlines the urgency of progressing Vision Zero – a package of initiatives recently adopted by Oxfordshire County Council, aimed at reducing deaths and serious injuries on Oxfordshire's roads to zero by 2050, with a target of a 25% reduction by 2026 and a 50% reduction by 2030.

Some participants took advantage during the project of opportunities for short term cycle hire (electric or non-electric) or bicycle repair and maintenance. This emphasises the value of these services, when affordably priced, in facilitating residents to explore alternatives to driving.

Several participants who were non-cyclists, or were not confident about cycling, expressed an interest in improving their cycling skills, but would not have been able to become confident cyclists within the timeframe of the challenge. This points to the value of providing longer term adult cycle training programmes designed to meet the needs of inexperienced cyclists.

The project included some participants who relied largely on walking. These people reported very positive experiences, and saw walking as a way to enjoy the beauty of the city, meet their neighbours and avoid the hassle and expense of parking in the city centre. This emphasises the importance of considering conditions for walking in the city, and their critical role for everyday journeys.

Recommendations



The experiences recorded by this group of people as part of the Oxford Car Free Challenge suggest that there are likely to be many more people, in Oxford and in other UK cities, who would like to reduce their car use and would value support to make changes.

A relatively simple package of support measures could be very effective at supporting a shift away from private car reliance in cities. In Oxford, offering this kind of support could be especially beneficial for residents alongside the planned introduction in Autumn 2024 of traffic filters, designed to reduce car use in the city while improving conditions for walking, cycling and wheeling, and enabling buses to run faster and more frequently, with the introduction of new bus routes. On the evidence of this project, recommended support measures include:

- Organised campaigns providing motivation and structure
- Personal travel advice, and information about the full range of local alternatives available
- Practical support, like cycle training, cycle servicing or discounted tickets

Based on the experiences of participants in the Oxford Car Free Challenge, our recommendations are for:

- **Structure:** Put structured and positive initiatives and activities in place that give people motivation for trying alternatives and making changes in their travel habits.

- **Information:** Ensure that information about the alternatives to private car use in the local area is easily accessible in one place. Consider introducing a support service for residents to get help and advice for car free travel.
- **Co-benefits:** Promote awareness of the range of benefits that can come from walking, cycling or using public transport, including the potential health benefits and cost savings, helping these options appeal to a wide range of people.
- **Amenities:** Where possible, ensure that services, activities and affordable food shops are provided in local areas, reducing the need to travel to out-of-town destinations.
- **Walking routes:** ensure key walking routes, like those to education and leisure facilities and workplaces, are designed to be safe and appealing.
- **Cycle training:** Make more cycle training available, including training for adults and training tailored to the needs of inexperienced cyclists.
- **Cycle routes:** Ensure a greater variety of safe cycle routes protected from traffic, including to edge-of-town destinations such as supermarkets and sports & leisure facilities, and nearby towns and villages.
- **Cargo bikes:** Consider ways to make cargo bikes more affordable or accessible. Ensure that local spaces and infrastructure (like bike parking) are appropriate for cargo bikes.
- **Bus reliability:** Improve the reliability of local buses through bus priority measures. Ensure that apps and timetables are accurate and easy to use.
- **Bus routes:** Provide a greater variety of bus routes, including routes linking different sides of the city, and routes serving edge-of-town destinations such as supermarkets, sports & leisure facilities and nearby towns and villages.
- **Car clubs and car sharing:** Improve public awareness of car clubs and encourage residents to try car clubs or car sharing where there isn't a feasible alternative to driving.
- **Campaign for better public transport provision at local and national levels:** Champion wide-ranging

improvements in the affordability, accessibility, and coverage of public transport modes and routes. In particular, reductions in the price of train tickets would support more people to do more of their journeys, especially long distance journeys, without a car.