

# DRIVING MODAL SHIFT FROM CAR TO BUS



**A PRACTICAL GUIDE TO ENCOURAGING BEHAVIOUR  
CHANGE, BUILT ON TWO YEARS OF WORK OF THE  
GREENER JOURNEYS BEHAVIOUR CHANGE LAB**

- 2 YEARS OF WORK
- 5 CITIES
- COLLABORATION WITH MORE THAN 20 OPERATORS, PTES, LOCAL AUTHORITIES AND OTHER SUPPORTERS
- OVER 10,000 TRIAL BUS JOURNEYS TAKEN
- 1,470 EVALUATION QUESTIONNAIRES COMPLETED





TACKLING CAR DEPENDENCY WILL BE CRUCIAL IF WE ARE TO ACHIEVE AN 80% REDUCTION IN CO2 EMISSIONS BY 2050. CARS PRODUCE 60% OF DOMESTIC TRANSPORT EMISSIONS WHICH AS A SECTOR IS RESPONSIBLE FOR A QUARTER OF EMISSIONS IN THE UK. WE KNOW THAT TECHNOLOGY CAN ONLY TAKE US PART OF THE WAY, AND AN IMPORTANT PART OF DELIVERING THE NECESSARY REDUCTIONS WILL NEED TO COME FROM MODAL SWITCH. THIS TOOLKIT BRINGS VALUABLE NEW INSIGHTS TO THIS AREA, BY EXAMINING NEW WAYS TO OVERCOME DEEPLY ENGRAINED AND HABITUAL BEHAVIOUR. I HOPE IT WILL PROVIDE A USEFUL RESOURCE FOR LOCAL PARTNERS IN HELPING TO DELIVER SOME IMMEDIATE AND LOW COST CARBON SAVINGS.

**CLAIRE HAIGH, GREENER JOURNEYS**

GREENER JOURNEYS' 'LAB', UNUSUALLY AND COURAGEOUSLY, DARED TO BE GENUINELY INNOVATIVE AND RISK FAILURE. AS A RESULT, ITS SUCCESSES ARE DEEP, OFFERING EYE-OPENING NEW OPPORTUNITIES. BY ITS NATURE THE LAB COULD NOT FOLLOW UP THE POTENTIALLY LARGE LONGER TERM OPPORTUNITIES IT IDENTIFIED, SO NOW IT IS TIME FOR OTHER PROFESSIONALS TO USE THIS TOOL KIT TO PICK UP WHERE THE LAB TEAM HAS LEFT OFF.

**PROJECT EVALUATORS LYNN SLOMAN AND IAN TAYLOR, TRANSPORT FOR QUALITY OF LIFE**

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# EXPANDING OUR LEARNING ON MODAL SHIFT



Since 2012, the Greener Journeys Behaviour Change Lab has applied behavioural insight to develop innovative ideas that encourage drivers to switch to the bus.

Working in collaboration with local authorities, the big 4 bus companies and supporters including charities and community groups, we have tested these ideas in a series of on the ground modal shift projects in cities across the UK.

We call these projects experiments, as they focus on unconventional approaches and are designed for maximum learning. We are now using that learning to create an easy to use set of tools, which will allow these approaches to be applied across the industry.

This toolkit means that for the first time, new, tried and tested ways of persuading car drivers to switch to the bus can be added to established methods.



**OUR WORK TO DRIVE MODAL SHIFT STARTS WITH BEHAVIOURAL INSIGHT. THERE IS A GROWING BODY OF KNOWLEDGE ABOUT HUMAN BEHAVIOUR AND THE WAYS IT CAN BE 'NUDGED' OR INFLUENCED.**

The key behavioural insights we have applied in our work are:

- **Social norms:** we are strongly influenced by what other people do. If we see people like us using the bus, we are more likely to give it a try too.
- **Trusted messengers:** whether we trust and believe what someone tells us depends on who they are. If we think someone is trustworthy and knows what they are talking about, we are more likely to listen.
- **Moments of change:** most of the time we stick with our habitual ways of doing things, but there can be moments where a different experience knocks us off course and makes us more open to change.

# THE STORY SO FAR

## YEAR 1

By using behavioural theory and applying it in practical ways, in our first year of work we developed a series of programmes designed to test different aspects of our thinking:

### SHEFFIELD

- We worked with the new Bus Partnership to encourage drivers to leave the car at home when travelling into the city centre. We aimed to reach drivers when they were open to change by targeting them at a time when the irritations of taking the car were top of mind, using guerrilla tactics to make direct contact with drivers around negative experiences such as parking, sitting in traffic or paying for petrol, offering them a voucher to try the bus next time they came into the city.
- We then collected all redeemed vouchers and followed up with participants to understand the effect of the scheme.
- Key learning points included: a strong voucher redemption rate at 15%, 32% said their trial trip was better than expected (and only 2% said it was worse), 57% of very infrequent bus users went on to use the bus again within a few weeks, 56% said it made them more likely to use the bus in future.

### LEICESTER

- With the help of charity Global Action Plan, we recruited a network of community ambassadors to promote bus travel to their friends and neighbours. They targeted people living on and around five specific bus routes, via community events and at venues like libraries and supermarkets, handing out tailored information packs and free ticket vouchers to the people they spoke to.
- Key learnings from our evaluation included: extremely high voucher redemption at 52%, 45% said their trial trip was better than expected, 53% of very infrequent bus users went on to use the bus again within a few weeks, 67% said it made them more likely to use the bus in future. The engagement the ambassadors delivered was very high quality (85% agreed they were friendly and helpful) but there was a trade-off between this and the numbers we were able to reach so in taking the project forward we started looking for lower cost ways of replicating this effect.

### MANCHESTER

- We worked with three different community groups to test how 'trusted messengers' could be used to raise the profile of the bus within their communities. Pure Innovations targeted school pupils with learning difficulties to give them the confidence to travel independently. Gaydio worked with a consortium of community radio stations, producing tailored communication about the benefits of taking the bus and promoting a Manchester-wide 'Get On Board Day'. Saheli, a charity offering support to Asian women and children fleeing domestic abuse, ran a twelve-week project with their service users

to introduce them to the possibilities and benefits of taking the bus rather than relying on lifts and taxis.

- The scale of these projects meant that we were able to collect less quantitative evidence, although the Gaydio-led community radio campaign proved particularly effective. In that case, 65% of very infrequent bus users went on to use the bus again within a few weeks and 95% of those surveyed said that community radio was a good way of getting a positive message about bus travel across. Our broader evaluation underlined the social benefits of this work.



## YEAR 2

Our aim in year 2 was to bring together our learnings so far, test some of the elements we did not yet fully understand in more detail and begin to build a replicable model for a city-wide programme, using a range of behavioural tools to promote modal shift.

We therefore turned again to Manchester to create a larger scale effort, which could pull together the positives from all our work to date.

The key elements of this Manchester project were:

- An overarching campaign – 'Get On Board Manchester' underpinned by three different supporting activities, each of which provided a route for distributing free tickets for trial journeys.
- Using street teams, in a similar way to Sheffield, to exploit 'moments of change'.
- Working with community radio stations to offer highly relevant messaging to their loyal listeners.
- Partnering with a trusted community group to engage people in their local community.

This activity delivered a deep level of insight about how best to apply this kind of approach in future. These detailed learnings are captured in our 'how to' guide, which follows.

In addition, industry organisations started to take the early learnings from the first year and apply them to their own campaigns, for example South Yorkshire PTE who used the street team approach from the Sheffield experiment to run further activity targeting car drivers in a number of cities across the region.

# TOOLKIT

## USING THIS TOOLKIT

This toolkit has been developed to help you use innovative methods to encourage modal shift, to gain new customers and to contribute to the development of a greener, less car-dependent travel system. We've packaged up the key learnings from delivering and evaluating our experiments over the last three years of the Behaviour Change Lab into a practical guide to allow you to take them forward into your own consumer-facing activity.

The insights particularly apply to running a contained period of activity in a city or town. Over the following pages we've highlighted some effective ways of influencing travellers to shift journeys from car to bus, with particular focus on: how to accurately target car drivers, using street teams to achieve scale at a low budget, and working effectively with the community.



### SOME HEADLINE INSIGHTS

- It is possible to accurately target non-bus users and in particular car drivers
- The use of free trial tickets influences perceptions and changes behaviour
- Using a voucher to capture data is valuable and allows further engagement
- The voucher, branding and campaign design offer a ready-made resource
- Street teams are a good way of achieving scale
- 'Cost-conscious' shopping areas are the best places to target with street teams
- Community groups play a useful supporting role to consumer-facing activity and deliver access to hard-to-reach audiences

### A READY-MADE RESOURCE

The campaign design and materials used in Manchester and Sheffield have been developed collaboratively by Greener Journeys and are now available for use by the industry. Of particular value is the voucher, which contains a proven mechanic for capturing valuable data from users. If you would like access to these materials please contact project partners Behaviour Change at [info@behaviourchange.org.uk](mailto:info@behaviourchange.org.uk)

COMMUNITY RADIO OFFERS SCALE AND A TRUSTED VOICE

BASE ACTIVITY AROUND CORRIDORS WITH A GOOD BUS SERVICE

TARGET 'MOMENTS OF PAIN' LIKE PAYING FOR PETROL/PARKING

TARGET BUSY COST-CONSCIOUS SHOPPING AREAS



GET ON BOARD



## ACCURATELY TARGETING CAR DRIVERS

The evidence from the tests conducted through the behaviour change lab shows that it is possible to effectively target people who are not already regular bus users, and to encourage them to sample the experience of using the bus via the offer of a free ticket. Nearly three quarters of those who redeemed vouchers in Manchester would not have travelled by bus on the day they used the voucher. Nearly half who then completed the survey afterwards said they were infrequent bus users (once a week or less).

# 72% WOULD NOT HAVE TRAVELLED BY BUS ON THE DAY THEY USED THE VOUCHER

Moreover, a significant proportion of those redeeming vouchers would have otherwise taken the car and are therefore our bulls-eye target for modal shift. Whilst rates differed by location for structural reasons such as the nature of the transport infrastructure, price of car parking and recent bus marketing campaigns, we found that between a quarter and a half of those who redeemed vouchers would otherwise have driven for that journey. Additionally, in Manchester, 36% of these were regular drivers.

### VOUCHER REDEEMERS WHO WOULD OTHERWISE HAVE DRIVEN:

<b>SHEFFIELD</b>	<b>51%</b>
<b>MANCHESTER</b>	<b>27%</b>
<b>SOUTH YORKSHIRE (BY SYPTE)</b>	<b>24%</b>

Capturing data like this is very valuable and isn't possible with conventional free ticket giveaways. Using the voucher mechanism allows us to learn about people's behaviour by building in evaluation from the start. It also allows for follow up afterwards, either for further evaluation through a survey or for incentivisation of repeated bus travel. We know from the tests that the free trips made a positive impression, particularly for infrequent bus users. In addition they led to repeated bus use amongst the same group in the few weeks following the campaign, and an expectation that they would use buses more in the future.

## 55% OF INFREQUENT BUS USERS MADE MORE TRIPS WITHIN A FEW WEEKS OF THEIR FREE TRIP

## VOUCHER REDEEMERS 21% MORE LIKELY TO USE THE BUS AGAIN IN THE NEXT FEW MONTHS

### TIPS ON TARGETING CAR DRIVERS



- Identify particular corridors with good bus services into the centre of town and base the activity around these routes
- Target your activity to 'moments of pain' when car driving is at a disadvantage (parking, congestion, petrol purchasing etc.)
- Encourage trial with a free ticket voucher
- Identify/screen for drivers at the point where tickets are being given away
- Use the voucher mechanic to capture data about people's behaviour when they redeem the ticket so that you can evaluate the effectiveness of the activity
- The validity period of the vouchers affects the proportion of car drivers redeeming: a longer time to redeem means an infrequent bus user will be more likely to find a suitable journey to try
- Very low car parking costs will affect the attractiveness of a trial day bus ticket



## USING STREET TEAMS TO ACHIEVE SCALE

One of the most successful elements of the experiments in targeting car drivers was the use of street teams to distribute the trial ticket vouchers and there is now sufficient evidence to support the use of this tactic in other locations, and on a larger scale. Street teams allowed us to achieve scale quickly, but in a low-budget and extremely targeted way.

Our activity was run at the weekend and focused on leisure trips (into the centre of town for shopping etc.) This represents our 'low hanging fruit' in terms of potential behaviour change. Not only are people in this situation more likely to interact with street teams but it's also easier to switch to the bus for a leisure journey than for a regular journey such as a commute.

Using street teams also allows the capture of valuable data for evaluation and follow up. In Manchester the teams collected email addresses on the street, which meant we could survey a control sample of an additional 1,765 people who took the vouchers but didn't actually use them.

After experimenting with this tactic in multiple locations we can now accurately predict in advance the likely rate of redemption of the vouchers and the proportion redeemed by existing bus users. This is vital in demonstrating the potential commercial implications. Generally the redemption rate gained through using street teams was high, and the proportion of existing users was very low, in comparison with industry norms for free ticket giveaways. The key factor that lowers the redemption rate is the validity period of the vouchers – the shorter the period, the less chance people will have to redeem.

	MANCHESTER	SHEFFIELD
<b>VOUCHERS DISTRIBUTED</b>	22,087	22,000
<b>VOUCHERS REDEEMED</b>	2,422	3,328
<b>REDEMPTION RATE</b>	11%	15%
<b>PROPORTION EXISTING BUS USERS</b>	28%	30%
<b>MAX VALIDITY PERIOD</b>	3 WEEKS	5 WEEKS

## TIPS ON USING STREET TEAMS

- 1 Use the face-to-face opportunity to screen for car drivers before giving away vouchers: simply asking "show us your car keys" is the most effective way to do this
- 2 Distributing small gifts (timetables, pens) to existing bus users reduces the risk of them still asking teams for vouchers, and therefore increases effectiveness
- 3 Working with the local authority can provide extra targeting opportunities e.g. access to the daily routes of traffic wardens
- 4 Make sure the teams record which batches of vouchers they are giving away at which locations – this will allow you to evaluate the effectiveness of the locations
- 5 Thorough briefing of bus drivers before and throughout the activity is vital to reduce the chances that they don't recognise and therefore deny the use of a customer's voucher; direct contact with the depot managers is needed
- 6 Running campaigns in the summer gives more likelihood of good weather and therefore high footfall

### WHERE TO TARGET

BUSY 'COST CONSCIOUS' (RATHER THAN 'HIGH END') SHOPPING AREAS NEAR TO MAIN CAR PARKS PROVIDE THE BEST LOCATIONS AND THE HIGHEST PROPORTION OF CAR DRIVERS REDEEMING VOUCHERS



## WORKING WITH THE COMMUNITY

Working with local groups and organisations as part of wider campaign offers significant opportunity in accessing harder to reach communities that tend not to be targeted by conventional marketing. This may be because of religious or language issues, cultural convention, or the need for deeper support or engagement to make the switch to bus. Additionally developing these kinds of relationships highlights the vital social role that the bus can play for the more vulnerable parts of society.

Through this work we have explored relationships with a variety of community organisations, all of which have offered great value in different ways. What they all had in common was that our message was being delivered by a source that people know and trust, and was therefore more likely to be taken on board.

### THE VALUE IN WORKING WITH COMMUNITY ORGANISATIONS

- Access hard to reach groups and strengthen cross-community ties
- Enhances perceptions of the activity as a 'public interest' campaign run in partnership with the community, rather than purely a commercial campaign (additionally there is potential for a positive effect on brand reputation)
- Despite much smaller overall numbers, targeting of car drivers was in general significantly more effective than with street teams
- Offers great value for money: our community partners delivered a great deal for a £5k donation
- Developing a long-term relationship would yield greater scale and effectiveness, in particular allowing time for volunteers to be recruited and trained, and for community events to be identified and attended

## PROPORTION CAR DRIVERS



### COMMUNITY RADIO

- In both years of the Lab, Gaydio coordinated activity with a group of local radio stations covering communities of interest and local areas
- Incredible value – combined reach of over 300,000 people
- Highly relevant – made vox-pop ads highlighting the benefits of the bus and the drawbacks of the car plus ad-lib coverage by presenters
- Gave away 2,000 free travel vouchers

### ETHNIC/RELIGIOUS/VULNERABLE GROUPS

- Saheli, a Manchester based organisation supporting Asian women fleeing from domestic abuse, ran introductory outings on the bus to local attractions for women who relied on lifts/taxis
- Offers great potential – a longer-term relationship would see Saheli engage a large community of non bus users
- Highlights the wider social benefit of the bus

### GRASSROOTS ORGANISATIONS

- In Manchester we worked with Groundwork, a nationwide network of community groups and volunteers, to engage car drivers
- Trusted – local people are more a trusted source of information than commercial companies
- Deeper engagement – face-to-face interaction allows for more of a conversation about the benefits
- Highly targeted – for example only distributing vouchers to homes with big driveways
- Variety – Groundwork distributed free travel vouchers through many different channels

# ENCOURAGING YOUNG PEOPLE TO DELAY DRIVING

In addition to our work in Manchester in 2013/14, we also set out to test a new insight, targeting young people. The result is useful new learning on some effective ways to reach and influence this audience.



Research evidence suggests that people who learn to drive later also drive less and use public transport more over the long term. Amongst people in their thirties, those who delayed getting a driving licence until they were 30 have been found to drive 35% less than those who learnt to drive at 17<sup>1</sup>. We therefore set out to test the effect of an intervention to encourage young people to delay the decision to learn to drive/buy a car. The test focused on highlighting the barrier of cost to see if that would have an effect on attitudes to getting on the road. Amongst 17-29 year olds, the most-cited reasons in research for not learning to drive are the cost of learning, cost of insurance, and cost of buying a car<sup>2</sup>. Additionally, there are signs that educating 17-18 year-olds about the costs of driving can lead to a significant change in attitudes to car ownership and use<sup>3</sup>. Our test therefore focused on highlighting the barrier of cost to see if that would have an effect on attitudes to getting on the road.

Working with First Bus and Bristol City Council, we commissioned digital agency e3 to create a new online tool 'How Much To Drive' and ran a small-scale marketing campaign to encourage young people in Bristol to use it. Effectively engaging young people is far from straightforward and conventional media methods often don't work. So the tool was built for smart phones and was quick, fun and required little effort to reach a result; it was promoted via search and social media advertising, as well as through posters and flyers in schools. After answering a few simple questions users were given a total of what it would cost to get them on the road, expressed in terms of how many trips to New York/bars of chocolate/Glastonbury tickets etc. it could buy.

1 [www.gordonstokes.co.uk/transport/peak\\_car\\_2012.pdf](http://www.gordonstokes.co.uk/transport/peak_car_2012.pdf)

2 National Travel Survey 2010

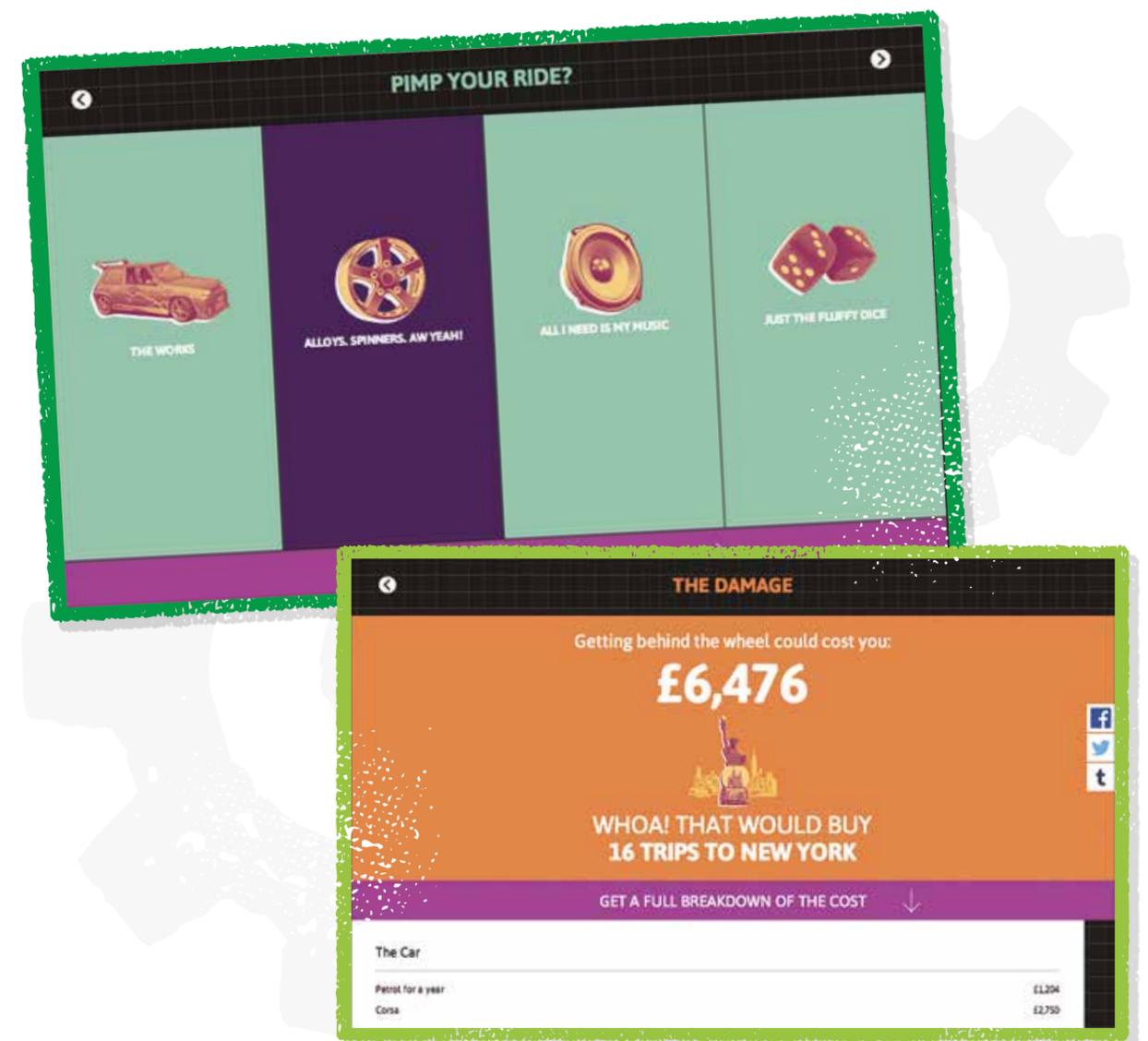
3 S Cairns and K Okamura (2003) Costs and choices: the effects of educating young adults about transport prices

Of the 1,730 unique visits to the website 37% went on to find out their cost to drive, considered to be a very high completion rate by the digital agency and a demonstration that it was engaging. It also appeared to have some instant effect on attitudes, with 21% declaring they could 'do better things with that money' after completing the tool.

Despite the short campaign period (6 weeks), tuning of channel selection between Facebook, AdWords and DoubleClick display advertising yielded significant learning in terms of which channels were most effective. Facebook provided the best value for money and best completion rate at 55%.

There is a trade-off between making a tool like this snappy and fun, and using it to capture email addresses/gather survey data. Despite that, a further 17% of those who completed the tool did go on to answer a brief questionnaire and declare their eligibility for a discounted bus pass. The tool had the most effect on those who had not yet started lessons in terms of making them less likely to drive/get a car.

Additional learnings include: focusing targeting on 15-18 year olds (to ideally reach people before they've started learning), experimenting with trusted/celebrity messengers, and building use of the tool into a more extended engagement process e.g. in schools.



# PROJECT PARTNERS

## BEHAVIOUR CHANGE

The not-for-profit social enterprise Behaviour Change works with government, local authorities, businesses and charities, using behavioural insight to tackle major social and environmental challenges. They have developed and managed Greener Journeys consumer campaigns since 2009.

## TRANSPORT FOR QUALITY OF LIFE

Transport for Quality of Life specialise in work that is at the forefront of sustainable transport. Projects include research into sustainable transport solutions: to identify ground-breaking best practice; to monitor and evaluate the effects of new interventions, and to develop further policy options.

# GREENER JOURNEYS

Greener Journeys is a campaign dedicated to encouraging people to make more sustainable travel choices. It aims to reduce CO<sub>2</sub> emissions from transport by encouraging people to switch some of their car journeys to bus or coach instead. Switching from car to bus for just one journey a month would mean one billion fewer car journeys on our roads and would save 2 million tonnes of CO<sub>2</sub> every year.

It is a coalition of Britain's leading bus companies and other supporters including Transport for London, Campaign for Better Transport, the RAC Foundation, Confederation for Passenger Transport (CPT), and the Passenger Transport Executive Group (pteg). Its primary funders are bus companies Arriva, FirstGroup, Go-Ahead and Stagecoach.



*transport for quality of life*

