

SHIFTING TO SHARING



The aspiration to own a car is not as widespread as in the past. This is just one example of a change in attitude towards travel, reports **Beate Kubitz**

Many of the pressing issues society faces – solving congestion, improving air quality, reducing obesity, improving cardiovascular health and reducing CO2 emissions – hinge on reducing car use and switching away from the internal combustion engine (ICE).

Although the private car seems to be embedded in society, it need not necessarily be so. Despite assumptions that car use will only go up, there are indications that people's behaviour is changing.

Car ownership is already losing popularity and people are receptive to alternatives. Digital transformation is enabling shared transport to be convenient and accessible and new modes are becoming more widespread as adoption increases.

The first Commission on Travel Demand report, published last year, found that, individually, we are travelling less often than we did 20 years ago – both in terms of distance and time spent. In particular, younger people travel less often and fewer miles than people over 60.

Among many factors, work patterns have changed and digital communication has reduced the need to travel for work, leisure and social purposes. Although subtle and only recently acknowledged, these trends will dent car use over the coming decades as these people age and particularly if subsequent cohorts are similarly less interested in car ownership.

As climate change has shot up the agenda and poor air quality affects people's life expectancy and quality of life, communities too have begun to demand change.

Consequently, there is enormous potential to change driving behaviour with only 9% of people actually enjoying driving, according to the Transport Systems Catapult report

Traveller Needs and UK Capability. Driving is a less attractive choice practically in urban areas, with journeys slowed by congestion.

While it will be difficult to change the attitudes and behaviour of the small minority with a 'petrohead' mentality, the vast majority drive for convenience, out of necessity and habit.

SHARED TRANSPORT MODELS

Changing public attitudes are coinciding with the digital revolution, which has enabled the development of shared transport models. They are maturing to the point at which they can play a significant role in the transport ecosystem and enable a shift away from car ownership and towards Mobility as a Service (MaaS).

Longstanding ideas have been enabled by technology and become embedded in cities, companies and people's lives. There will have been car clubs in the UK since the turn of the millennium – almost 20 years.

What started as cooperative groups set up with paper and spreadsheet booking systems and (sometimes quite informal) key safes has been transformed. Car clubs can now manage fleets with telematics, which can be booked online and accessed by smart card or app.

Bike share and ride sharing have become agile – with bikes booked through smartphones and rides arranged at short notice online. In these rental experiences, there is no longer a booking station, ticket office or human eyeballing the hirer. Trust is mediated by online identity, credit card and driving licence checks.

This automation has enabled the adoption of self-service assets: convenient, publicly accessible, shared transport. This development is necessary for shared transport to scale up.

FOSTERING CHANGE

These changing patterns are not entirely disconnected. The issue is how to foster shared modes, growing their use beyond the early adopters and digital natives to drive down car journeys, reducing congestion and emissions, improving air quality and public health.

Shared transport comes in two distinct flavours. Bike share and car clubs enable

people to share assets – bikes and cars – that are publicly accessible, while lift or ride sharing enables people to share a journey. Each form of shared transport presents a distinct opportunity. But there are equally distinct barriers to take up.

For bike share and car share, the norms of using 'public assets' have to shift – with people accepting that they don't need to own vehicles to use them. For ride sharing, our attitudes to sharing close spaces come under scrutiny. However, while these are components of people's decision making, they are balanced with other factors common to other forms of transport – cost, convenience and speed.

In each instance, there are ways to engage with people balancing these factors; however, in the first instance it can be hard to get people to consider them as options at all.

PSYCHOLOGY AND MAKING TRAVEL CHOICES

Few people change their transport behaviour instantly just because a new service exists. People are generally creatures of habit who establish transport patterns, modes and routes for specific purposes, often for several years at a time, only changing them in response to life events, changes in circumstances and sometimes in response to severe disruption.

Whilst most people might not actively love driving, car ownership has been aspirational for more than 50 years – over this time, it has become a necessity for many who do not have access to suitable public transport. Running a car has become a cost that many assume they cannot cut, and the size of their investment combined with the marginal cost of additional miles means that they use it 'to get their money's worth' even when other options exist.

The door-to-door convenience of car ownership has become embedded in people's travel assumptions, along with the 'private bubble' that a personal car creates around them for the duration of the trip.

Add in concerns about stranger danger, inculcated as children, and our collective cognitive dissonance about the impact of our actions on others and the environment, and there's a potent mix of attitudes, assumptions and behaviours that all ►

ABOUT THE AUTHOR

Beate Kubitz is a writer, researcher and consultant in new mobility. She is the author of the *Annual Survey of Mobility as a Service in the UK*, as well as reports on car clubs, bike-share, open data and transport innovation. She is director of policy and communications for TravelSpirit and previously worked for CoMoUK.



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Ben Lawson, Enterprise Holdings vice president of Strategy and Project Development, UK & Ireland

Case Study: Liftshare

Ali Claburn, founder and CEO of ride sharing platform Liftshare, identifies three elements around shared transport that need to be in place for it to work: critical mass, trust and a working system.

Liftshare has developed a business model as a service to businesses. Working with employers – who may have issues with traffic and congestion on their sites or insufficient parking for their workforce – Liftshare analyses the proportion of staff who make similar journeys and builds a lift-sharing platform for the workforce.

Working with employers boosts all the elements that make Liftshare work. Communicating with staff through the employer triggers people into rethinking their journey to work.

Analysis of potential sharers enables people to see that there is a critical mass of options for shared trips. And the fact that people work in the same organisation boosts trust.

Claburn describes how lift-sharing takes root: "People start sharing usually because of an employer scheme – but they continue sharing because they've discovered savings and made friends. It's a sharing mindset rather

than a renting mindset. Sharing is not about personal gain so there's more of a trusting network."

Within a work community, the fear of being let down is a lot lower – there's a perception that colleagues are less likely to let you down.

When people worry about risk, it's not necessarily solely the risk to their personal safety but maybe of arriving late or social awkwardness.

While schemes work perfectly well where there are no issues over parking availability, if there is pressure on parking (e.g. through reserved parking), the percentage of people liftsharing increases.

Liftshare also offers a public facing service (about 50% of users) besides its platforms for businesses.

"People signing onto their workplace scheme usually have the option to make their journey public – which helps boost the pool of people to draw from," says Claburn. "Of these business users, 70% are willing to share more widely – indicating that whilst the UK is different from our continental neighbours, it's maybe not as different as the prima facie case suggests."

He also notes that the growth of ride share schemes is greatly influenced by wider issues that drive travel choices, including fuel prices, train strikes, rail ticket costs and congestion charging.

► have to be addressed before shared transport uptake will increase.

Nick Reed of the Smart Mobility Research Unit at the University of Hertfordshire has researched the psychology of sharing in the context of sustainability and transport. While he has found that most people's 'ideal' version of their life would be to act in an environmentally sustainable way, many of the considerations involved in being more sustainable don't figure in their thought processes or practical decision making.

For example, when researching the potential for a loan scheme for pushchairs, which would reduce their lifecycle environmental impact by refurbishing and rehiring them several times, initial research into the factors people considered when obtaining a pushchair just didn't include sustainability.

The research methodology involves giving people open-ended questions about how they make decisions which allows the researcher to gain an insight into their thought processes – and is closer to revealing real-life decision making.

The University found that if people are asked directly whether they would consider the refurbished pushchair option as sustainable, they agree.

However, more subtle open-ended questioning reveals that the hierarchy of factors involved in choosing a pushchair focus on issues like the safety of their child. So

50%

reduction in parking requirement when lift-sharing

relative sustainability doesn't figure in their decision making.

Likewise, for transport, if the main consideration is getting to work on time, that is the focus of the decision-making process. Disrupting this process and getting people to think – and then behave – differently requires issues to be raised in quite direct ways.

ACTIVE TRAVEL – DISRUPTING DRIVING PATTERNS

There is a strong movement to improve air quality around schools by reducing emissions from car exhausts at the school gates. Ideally, parents should walk or cycle their children to school but even initiatives to stop parents sitting in their cars with their engines idling can have an impact.

Russell Scott primary school in Greater Manchester took action by first educating pupils about the dangers of vehicle emissions and holding an open meeting with parents, community police and highway engineers.

The pester power of children asking their parents to turn off their engines was particularly effective. The campaign was launched with children, accompanied by the school's community support police officer, patrolling the streets and asking parents to turn off engines or move away. The combination of staff, pupils and traffic officers keeping the tone light but on message took effect over several weeks.

The majority of families began walking to school and the streets around the school are no longer clogged with cars at the

beginning and end of the school day.

Improving active travel is a key way of reducing car use. Campaigns work where there is sufficient infrastructure to support the new behaviour. Reducing cars around schools makes the whole area feel safer – and supports the new ‘walk to school’ behaviour.

For cycling, the biggest barrier is the requirement for people to feel safe. Better cycle infrastructure is key. The huge community engagement initiative by Manchester’s cycling champion, Chris Boardman, has created excitement and anticipation around the building of the Bee network of segregated cycling paths. Cycling routes built through community engagement with cyclist input – like those in London and Cardiff – tend to be well used.

LESSONS FOR SHARED TRANSPORT

In another study, Nick Reed surveyed a small sample of commuters about the things they took into account when deciding how to make their journey to work. Although these people would all consider lift sharing, the emerging issues were around saving money, arriving on time and not compromising personal safety.

While the sample was only indicative, it reflects that for those people considering shared transport, the biggest considerations are likely to be extremely practical.

The experiences of established and successful car clubs and ride sharing schemes chime with this.

Ride sharing has found traction in par-



ticular with businesses attempting to solve congestion and parking problems on larger sites (see Liftshare case study).

It’s mathematically obvious that two people who used to both arrive in separate vehicles from a similar start point will halve the number of cars on the road by combining their journeys – and achieve a 50% reduction in parking requirements.

While ride share reduces vehicle use, car clubs are recognised as a way to reduce private car ownership, with CoMoUK estimating that each car club vehicle replaces the ownership of more than 10 cars.

Siting shared transport where it will be used is key to success. There are three elements to this.

The first is a suitable population. Demographic profiling using tools like Mosaic has enabled car clubs to look at their membership and identify areas where people are likely to use them if introduced.

The current car club membership profile splits roughly into two thirds of people who are not experiencing economic stress but take a considered approach to travel and evaluate smarter, cheaper and more efficient choices, and a third where financial pressures influence their decision to join a car club.

▲ **Enterprise Car Clubs make vehicles available close to more than 150 mainline rail stations**

The second siting element is the public transport infrastructure. Car clubs are far more likely to be successful where they provide an adjunct to frequent and reliable public transport.

Ben Lawson, Enterprise Holdings vice president of strategy and project development for the UK & Ireland, says: “Location is a key factor in car club uptake. A key example is how a combination of train travel for long journeys and a car club for the last few miles can encourage greater use of shared transport.

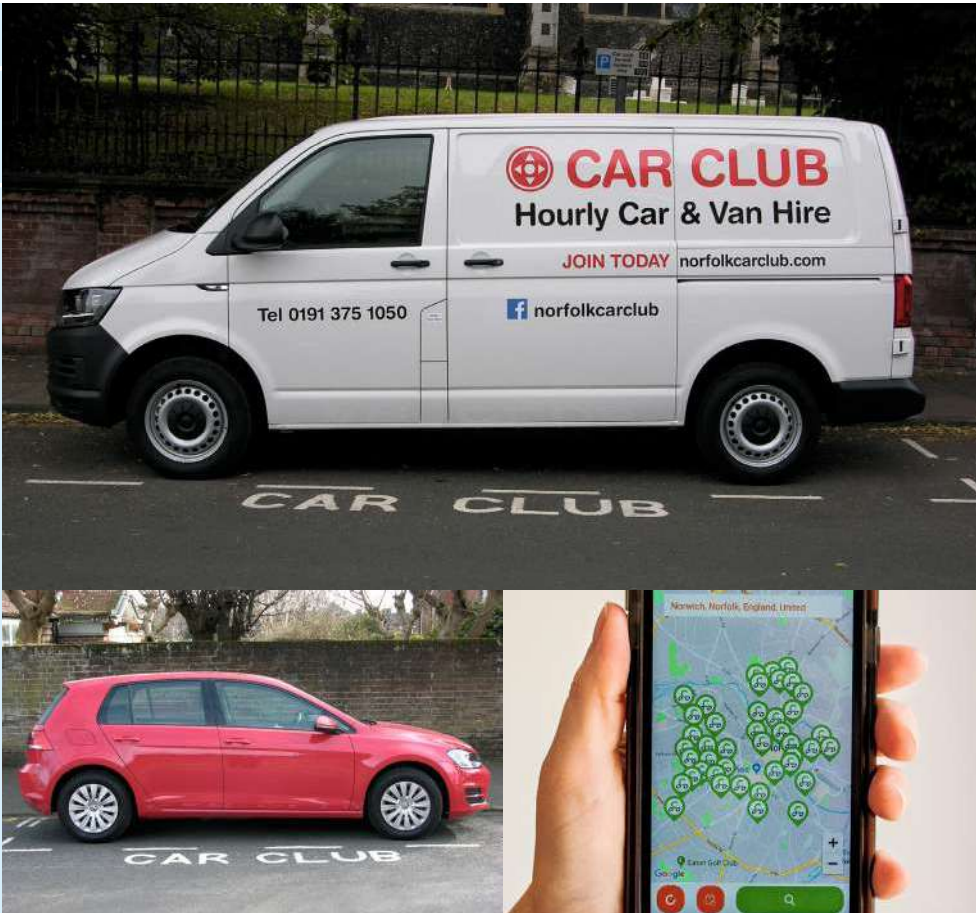
“We have Enterprise Car Club vehicles within 500 metres of 152 mainline and regional rail stations. Based on estimates of the number of train journeys during 2017 and 2018, we estimate that more than a quarter (27%) of all UK journeys by rail either begin or end within 500m of an Enterprise Car Club bay.”

Enterprise Car Club research found that two thirds of customers combined use of the car with the train and they are doing so at least once a quarter. Just over half (55%) said they were driving fewer miles as a result, equating to an average saving of 71 miles.

Following a CoMoUK study that identified a link between customers of car

71 miles
saved per journey when combining train travel with car club use





Case Study: Norfolk Car Club

The Norfolk Car Club is a Community Interest Company with 60 cars in Norwich, a city of 141,000. This is an exceptional sized car club outside London; in contrast, Derby is served by a mere five car club vehicles.

The success of the car club has hinged on investment, including funding from the local council, DfT and contributions from S106 agreements (private agreements between local authorities and developers). This has enabled the car club to provide a network of vehicles and expand as demand increases.

This demand is created because parking is controlled. Norwich has central parking restrictions because, historically, parking demand has been high and has created pressure on the streets for both residents and businesses.

However, the car club has been allocated on street parking for its vehicles as it has grown, with space allocated whenever it has met cer-

► club vehicles and those using rental cars, Enterprise is now rolling out a programme to site car club vehicles at many of its branches to speed up access to mobility for regular renters.

"Given we have an Enterprise Rent-A-Car branch located within 10 miles of 93% of the UK population, there is tremendous scope for us to increase access to shared transport, offering more options for busy travellers," says Lawson.

The third element is public policy, particularly around parking, as demonstrated by the rapid expansion of the Norfolk Car Club (see case study).

BIKE SHARE

In the 2018 Annual Survey of Mobility as a Service, people working in the transport sector ranked bike share the third most essential mode to a MaaS system.

There are now bike share schemes in 26 UK cities and areas – with docked, flexible or dockless schemes and 'hybrid' schemes all in play. It's recognised as a last mile solution enabling multi-modal travel, with 49% of respondents to the Bike Share Users Survey 2018 using it in conjunction with another mode.

The Bike Share Users Survey found that the top three reasons for people to

use bike share were:

- Time saving
- Making the journey easier
- Fun and fresh air

Bike share is one of the few modes of transport that can make its users happier. However, concerns around safety and the lack of infrastructure are always the greatest barrier to cycling. While cities with bike share schemes tend to have lower rates of cycling accidents, indicating that a critical mass of cyclists improves the experience for all, the development of infrastructure is still essential.

Successful bike share schemes are those embedded in communities – with a number of partners including the local authority, police, businesses and universities as well as a strong operations team.

The Cardiff bike share scheme is used at twice the UK average rate of bike hires per day.

It was set up with strong partnerships between the local authority, the operator and the university and was launched in a context where a strong dialogue between the city council and cycling groups had helped direct priorities.

In addition, investment for the scheme came from both central Government, the university and the operator – so all have a vested interest in its success.

▲ **Norfolk Car Club has had contributions from S106 agreements under which developers give back to the community**

93%
of the UK population are within 10 miles of an Enterprise Rent-A-Car branch

NEW SHARED TRANSPORT?

As technology advances yet further, potential new forms of shared transport based around autonomous vehicles are expected to emerge.

Current predictions are based on modes which are effectively extensions of new demand responsive transport or 'taxi bus' models which have been trialled over the past three years. Existing demand-responsive minibus based services have had teething issues, with many of the trials being withdrawn.

It has proved challenging to keep costs low enough to meet the price point at which people are happy to use them.

While this indicates that a lower cost driverless vehicle may be able to deliver the service in future, other studies indicate that a hesitancy over driverless services will need to be overcome.

Addison Lee has undertaken research into people's attitudes to these vehicles. This indicated that 85% of people would be willing to use an autonomous vehicle, but only 46% were prepared to share it. The presence of an on-board steward would increase the number of people willing to

tain metrics. In addition, S106 agreements have been used to ensure development supports the car club (and is less favourable to car ownership).

Marketing has been consistent, long-term and well-targeted, recognising that people rarely make a snap decision to join the car club. It has used both traditional and social media, and has also targeted streets surrounding cars with targeted leaflet drops.

The key messages have been around saving money, easy parking and 24/7 availability.

This has been successful. Norfolk Car Club grew by 36% in the first eight months following DfT investment, with nearly 250 new members joining. It also saw a 25% increase in the number of bookings of vehicles.

The car club has been proactive in creating a network of cars so that they are perceived as a realistic alternative to ownership without the stress of finding parking spaces.

As the network has grown, the car club has noted a greater enthusiasm for member-to-member recruitment. Perceived availability has been key to this rise in member marketing.

share but this would have cost implications.

Finding the balance point between costs and service delivery to enable profitability will become the holy grail of these services.

TIMESCALES FOR CHANGE

Autonomous vehicles are still some way in the future and behaviour is already changing. Communities are demanding better active travel infrastructure and acting to improve air quality.

Simultaneously, our enthusiasm for 'self service' and automated use of on-street assets like bike share and car clubs has increased.

In the first 10 years of the Annual Survey of Car Clubs, membership grew from 32,000 to a quarter of a million. Bikeshare is also growing – with more than 50,000 bike share trips now taking place per day in the UK.

While there is still a long way to go before there are truly comprehensive networks enabling alternative travel, the shifts in behaviour are heartening. By the time autonomous ride share is a reality, attitudes are likely to have shifted further.

GAINING MOMENTUM

It is down to the measures taken today to reinforce the direction of travel and give the current trends momentum to take the

Within the first

10
years

car club memberships grew from 32,000 to 250,000

▼ **Bike sharing – whether docked (as shown), flexible, dockless or 'hybrid' schemes are now in play**

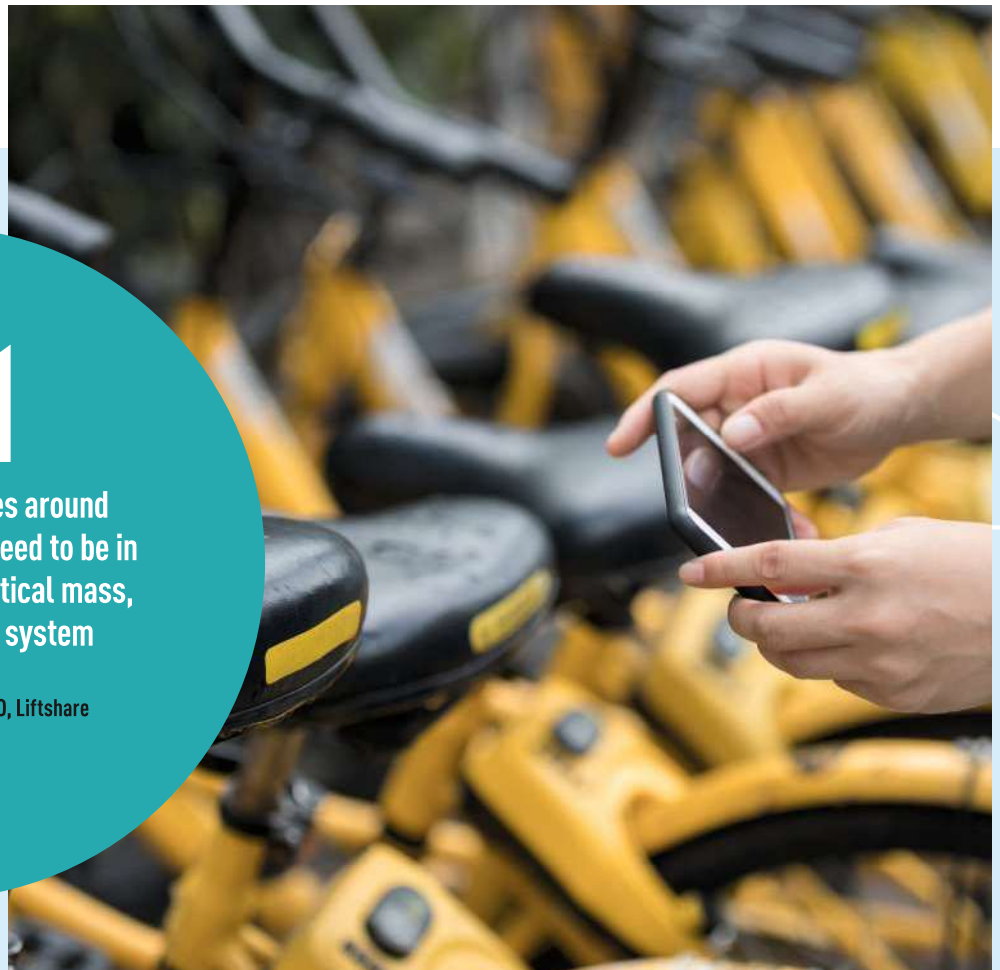
opportunities and make them reality.

These encompass a variety of measures:

- Enable the development of the car club and bike share networks through investment, partnership and policy so that networks of shared assets are widespread and accessible.
- Use policy levers such as parking and air quality strategies so that alternatives are as attractive and as (or more) convenient than car ownership.
- Encourage businesses to work proactively with staff on travel plans and provide lift-sharing platforms.
- Work with communities to challenge anti-social driving and parking behaviour and develop active travel infrastructure.
- Work with developers to integrate active and shared travel into developments (and reduce the need for parking).

Between practical changes and policy measures, we can disrupt people's patterns of behaviour so that they consider their choices – and have alternatives available when they do. [ST](#)

TURN OVER FOR THE PEER REVIEWS



There are three issues around shared transport that need to be in place for it to work: critical mass, trust and a working system

Ali Clabburn, founder and CEO, Liftshare