

### **Commission on Travel Demand Shared Mobility Inquiry: Call for Evidence**

12 April 2019

#### General

Transport for West Midlands (TfWM) welcomes the opportunity to comment on the Commission on Travel Demand Shared Mobility Inquiry: Call for evidence. This response is made on the basis that it is from the Local Transport Authority (LTA) for the West Midlands Metropolitan area.

TfWM response to the call for evidence aims to consider and address the following topics in turn below:

- What do data sources tell us about how shared transport is today and how that has changed?
- Where is sharing happening most intensively across the UK and what is limiting its spread?
- Who is sharing and for what purposes?
- What is different about sharing a car or taxi to sharing on public transport and why?
- What interventions have been effective at stimulating sharing?
- What is the potential to accelerate decarbonisation through sharing?
- What are the implications of sharing for the future of parking? (e.g. increasing pick-up and drop-offs; charging shared electric vehicles; reducing parking for cars)

#### What do data sources tell us about how shared transport is today and how that has changed?

As shown in West Midlands regional data sources, as a whole people appear not to like sharing vehicles. Both regional and national data demonstrates that 94% of all people like their independence which a car brings and 87% of people felt their current lifestyle requires them to own a car or van, and would be unwilling to share.

From TfWM survey data on perceptions of taxis, it was felt:

- Sharing a taxi could add delay to a journey and reduce its key benefit of being instant,
- Only at nighttime did people think taxi ridesharing was more appealing.

However data on taxi operations is somewhat limited across the region with very few operators being willing to share data.

TfWM has some data on Birmingham City Council's led car club scheme - 'car2go' which operated in Birmingham during 2013/14. However low uptake alongside a strong culture of people not car sharing, and the cities high private vehicle ownership saw the scheme cease, after just one year of operation.

Today only Enterprise, Co-Wheels and the car club EV trial in Solihull are in operation across the region. Yet like car2go, take up is slow and much lower compared to other UK cities.

Where vehicle sharing is successful in the region, marginal and excluded groups tend to be benefiting. For example – Ring and Ride, school transport provision for disabled children and DRT services to out of town employment sites. These operations serve niche markets and are often subsidised by either local authorities or employers and are not currently operated commercially.

Looking at commercial opportunities, a rideshare scheme is currently being developed in Wolverhampton, in partnership with Uber and will be launched later on in 2019. However DRT services as a whole, have not proved profitable with many trials like Bristol Slide closing as routes competed directly with high frequency public transport services.

Liftshare are present in Sandwell MBC, supporting residents to access key services across the borough such as Sandwell College, Sandwell Council House and key leisure facilities. However uptake is relatively low. Across Birmingham, car



sharing is used at the QE Hospital and by large employment sites like Jaguar Land Rover. Longer distance car sharing schemes such as BlaBlaCar also offer competition to low cost train travel and is used by younger people/business travelers throughout the West Midlands. However there is extremely limited data on this new 'private transport sector' (including taxis, car sharing clubs and car clubs). These schemes are also not always available to those with limited mobility – further reducing their mass appeal.

To fully understand the entire transport network, access to data on private sector transport modes would add value. However, these private organisations are under no requirement to share their data – and as a result, a data gap exists for local authority policy makers and data analysts alike.

Based on these factors, TfWM sees shared mobility as not being widespread currently. However with a range of digital platforms being introduced such as Mobility as a Service (MaaS) and the general shift towards a sharing economy, we could see shared mobility develop significantly over the next decade.

# Where is sharing happening most intensively across the UK and what is limiting its spread?

The West Midlands has recently launched a bike share scheme and its taxi rideshare scheme is due to be launched in the spring. However these are not on the scale of those seen in London and other European cities.

In terms of rideshare, London and its surrounding area has seen various DRT models being launched including CityMappers Smart Ride, Via Vans, Go-ahead and Arriva Click in Kent. Additionally, Oxfords Pick Me Up also provides a range of DRT services. Bikeshare schemes also appear more active in the South.

In terms of what is limiting the spread of shared mobility, issues such as car ownership ever rising, an ever growing population, the fall in the cost of buying a car and a significant rise in the number of women in work could be key factors.

Having limited data from the new private sector transport modes could also be restricting shared mobility and a number of psychological and behavioral barriers may further be at play, where our culture of 'not talking to strangers' is ingrained from a young age. Yet at the same time, younger people may becoming more open to technology and the sharing economy, as are often priced out of owning their own transport.

The advancement of technology could also be a direct barrier as to why some people do not share mobility – especially those with limited access to a smartphone. Older people in particular may become at risk of being 'designed out' – despite being the group who could most benefit from shared mobility.

A number of shared mobility schemes like bike share, car clubs and rideshares are not always fully accessible and do not allow for those with limited mobility to use them. This can then limit their spread.

Technology advancements are also reducing the need of human operators who currently provide assistance to many disabled and elderly passengers. Increasing automation often sees the 'customer assistance' role being delivered by machines, instead of people which doesn't always work for everyone.

Shared mobility schemes may also provide disbenefits to those with poor mental health or developmental conditions, who may not feel comfortable sharing with strangers and the potential safety issues.

Therefore, despite the well-intentioned ideas of shared mobility, it cannot fully alleviate the need for private car ownership. Shared mobility is only truly effective if other services, which support it offer a fully integrated and accessible transport network.

On a positive note, we are starting to see some local authorities taking a 'total transport' approach to procuring subsidised transport services, with the



likes of patient transport, home to school transport and subsidised bus services being brought together under a single framework. This helps improve the coordination of transport services and stimulates shared mobility for all. However shared data is key to this being achieved effectively, together with the needs of disabled people being fully realised.

### Who is sharing and for what purposes?

Across the West Midlands, sharing is currently limited to a Ring and Ride service, specialist local authority transport and patient services. However a Demand Responsive Transport Framework is being drawn up which highlights where Demand Responsive Transport (DRT) models could be expanded upon to support more people and how innovation could help optimise such services.

Nextbikes (the West Midlands bike share scheme) has also recently been launched, which will see 5,000 bikes for hire on the regions streets as well as hundreds of docking stations and hubs installed. This scheme will give people greater choice in how to get around, especially in our major towns and cities and will complement the wider public transport network.

The region is also leading the way in innovative technology platforms which support new shared services through MaaS. MaaS can help make the planning and execution of multimodal journeys easier and shift people away from the private car towards more sustainable options.

Whim is the mobility app used throughout the West Midlands to deliver MaaS and support the integration of different modes onto a single platform. This in turn can then enhance public and private transport services, provide better journey information and fully integrate ticketing and payment systems. Despite only launching last year, numbers are continuing to rise as more modes become included onto the platform.

From evidence gathered to date, users of the Whim app tend to be single, living in city centres

and with no dependents. However in the future, opportunities to encourage further sharing could be achieved through Maas.

#### What is different about sharing a car or taxi to sharing on public transport and why?

Bus and rail services are provided for large numbers of people, whereas taxi services provide an individual service with a more personal interaction between the driver and the user.

From general survey data gathered by TfWM, taxis are often perceived as relatively safe, more convenient and with personal space. Buses on the other hand are seen for the masses and serving key corridors predominantly.

DRT however is often seen as something in between, with dynamic DRT services performing ride sharing services (such as Uber Pool) at public transport prices.

Other DRT services which have very niche markets can also stir up strong perceptions and stigmas of being too tailored to those with mobility issues. These services do not often make use of innovation and technology and can hamper the inclusion of DRT in the wider public transport offer.

## What interventions have been effective at stimulating sharing?

Technology and innovation platforms such as MaaS can help initiate shared mobility and increase vehicle occupancy rates.

The West Midlands is currently leading on a range of innovative solutions as discussed earlier. These solutions will help to address some of the capacity and congestion challenges that greater demand for movement brings, while also seeking to reduce the environmental impacts from transport. These initiatives are now outlined below:

Data sharing: Having access to data based on new mobility services helps improve choice and



the operation of the wider transport system. Increased data sharing is vital to ensuring an open mobility marketplace, enabling a better user experience and improving the safety and efficiency of the transport network.

Much progress has already being made in encouraging the rail and bus industries to share their data. However with many new privately-run transport services becoming increasingly important in the transport system of today, they also need to play their part in sharing data. This will then help to integrate journeys across different modes and help to improve how transport authorities develop and manage the transport network more efficiently and effectively.

Future Mobility Zone: In terms of the West Midlands, we are capitalising on vehicle manufacturing opportunities and new mobility technologies being trialled in the region.

For example, the region is benefiting from a £20m grant from the Department of Transport for its Future Mobility Zone. The zone will demonstrate a range of new mobility services and modes with a focus on significantly improving mobility for a range of consumers. In particular, the new Future Mobility Zone will aim to:

- Enhance transport services such as better travel information during and before journeys;
- Explore new demand responsive services;
- o Deliver incentivised travel choices;
- Support self-driving vehicle technology;
- Enhance the Swift ticketing platform such as capping; develop its ability to make payments via Swift beyond just public transport such as for parking or Local Authority gyms and libraries;
- Advance data analytics and processing, and develop a tool to provide accurate travel guidance and travel time predictions across all modes including public transport;
- Taxi-share: Working with Wolverhampton to support a trial of taxi sharing in order to improve access to key transport interchanges and destinations which are difficult to access via conventional public transport; and

 Implementing a large-scale self-driving vehicle showcase demonstration trial (extending beyond conventional public transport solutions) to cover self-driving services.

All of which will further help simulate shared mobility in the future.

#### Connected and Autonomous Vehicles (CAV):

It is important to note the key role CAV will play in the region, which will further help stimulate mobility sharing. Currently over 50 miles of roads across Coventry, Birmingham and Solihull are being used for the real world testing of CAV technology. The West Midlands is also a world class centre for the research and development of CAV technologies and at the forefront of automotive manufacturing.

Testing of 5G: The West Midlands is trialing 5G and will be a new 5G test bed. In particular this would support the validating and deploying of connected and self-driving vehicles and provide the technology to support future shared mobility.

Reallocation of road space: Across a number of urban centres, space for vehicles is being reduced in favour of space for people; encouraging more sustainable and active travel, CAV opportunities and mass public transport – particularly across the West Midlands Key Route Network. In turn, this will stimulate sharing.

Greater highway powers: Greater flexibilities around by-laws and highway powers to respond to new transport services could also help stimulate sharing. By allowing for greater flexibility, innovative vehicles and services can be trialled easily to meet emerging trends such as CAVs, DRT, dockless bikes, scooters and whatever the next wave of change may bring to our roads.

Policy interventions: Policy can also act as a key intervention which encourages shared mobility. This is particularly true where travel plans have been put in place, workplace parking levy's introduced or car parking spaces reduced.

In addition, where congestion charges have been introduced or clean air zones trialled, sharing has further been stimulated.



Consistency in taxi licencing standards: Setting national minimum standards for taxi and PHV licensing (in particular to ensure passenger safety) whilst allowing local transport authorities to set standards as they see fit will provide more consistency and closing enforcement loopholes through ensuring that a vehicle has to start or finish its journey in the area it was licensed.

Introducing clear statutory definitions, removing legal ambiguities and moving the functions of taxi and PHV policymaking out of the courts and into wider city planning functions with give local transport authorities the powers to limit taxi/PHV numbers (where required) and better manage the implications for air pollution, traffic congestion and ridesharing schemes.

Healthier Streets Approach: Within the West Midlands, there is a push to develop and deliver a more people-centred approach which prioritises modes such as walking, cycling and public transport use to support improved health and wellbeing. The Healthy Streets approach is a useful tool in achieving this and our recently published Health and Transport Strategy acknowledges that shared mobility can play a large part in increasing productivity, preventing ill health and improving the wellbeing of people.

Ensuring affordability and accessible: People should not be 'priced out' of future mobility scheme. We need to ensure that new transport models, such as ridesharing apps, complement – rather than hollow out - affordable transport options and that access to autonomous public transport/CAV for people on lower incomes is affordable and with a range of packages developed for all.

Technology should also never be a barrier to travel but only ever aid it. Potentially new door-todoor journey planning apps could help disabled people plan their journey and check how accessible their routes and services actually are. The app could make use of crowd-sourced intelligence; allowing users to contribute to accessible routes they have successfully used as well as report routes where difficulties were encountered or which need improvement - gradually building up a map of accessibility across the country and an invaluable source of data for transport planners and policy makers alike.

Other extraneous factors: Finally other factors such as high fuel and insurance costs can act as a barrier and for younger people, the cost of learning to drive has acted as barrier and led to the increased sharing of modes.

### What is the potential to accelerate decarbonisation through sharing?

With transport accounting for around 25% of total EU greenhouse gas emissions, it is important we focus on a range of mobility measures including electric cars and trains, to the use of biofuels and solar power technology to promoting active travel modes such as through the likes of Nextbikes and E-bikes.

Single occupancy car / van trips in particular account for 62% of all journeys made and there is huge potential to reduce this figure through the sharing of modes. This is one area was a huge difference could be made.

However there are also wider issues at play which need consideration. Aviation accounts for 11% of the energy demand in transport, and the movement of goods, as well as people also plays a major role in greenhouse gas emissions.

Currently only 6.7% of freight is moved by waterway with 75% moved by road. A shifting towards more sustainable ways of transporting freight will likely accelerate decarbonisation much more than through 'mobility sharing' alone.

We need to harness greener technology in general– through considering the importance of carbon reduction, air quality improvements and cleaner vehicle technology as well as consolidating consignments; maximising the potential of rail and water infrastructure; influencing customer behavior and innovation in the last mile of deliveries are all vitally important.



We also need to modify our existing public transport to become electrified or hybrid. In general the shift towards electrified transport will only put extra demand on the energy system, and powering electric vehicles using fossil fuels is often seen by many as counterproductive, when it comes to reducing carbon emissions.

Instead, the success of transport decarbonisation relies on the continued success of renewable technologies.

#### What are the implications of sharing for the future of parking? (e.g. increasing pick-up and drop-offs; charging shared electric vehicles; reducing parking for cars)

There could be many benefits to increasing shared mobility, including freeing up on street and off street car parking spaces for other modes and new uses such as public transport priority measures, public realm schemes and walking and cycling infrastructure.

Yet at the same time, if sharing mobility becomes the norm, dedicated pick-up and drop-off lanes and free floating car sharing / ridesharing spaces will still need to exist. And these will need to be managed effectively.

In fact research has shown that many car sharing schemes may be unused during non-commuting times and the numbers of shared cars in residential streets could still match the number of morning commuters, meaning parking is still an issue.

Parking also delivers significant funding for local authorities and any lost revenues could have an impact on their incomes.

The government will also need to apply policy to limit the levels of parking that exist and to enable car parking spaces to be used for more productive uses.

It is imperative to tap into the planning system and work with developers to provide shared mobility parking including bike share and car club parking options.

Working with the business community in terms of managing their car parking allocations will also be a vital requirement and ensuring their involvement in the use of car sharing or car club schemes etc. Working with public transport operators, to ensure the existing transport network is connected and integrated with car-clubs and bike sharing schemes will also be vital to its success.

Finally it is important to enable shared mobility solutions to use on-street car parking spaces and not regard the subsequent loss of revenue as undesirable (due to the potential positive contribution shared mobility will have on reducing trips made by car). The long term benefits need to be considered from the start to ensure our streets become safer and more sustainable for all who use them.