

House of Commons Transport Committee: Mobility as a Service inquiry ~ Response from Campaign for Better Transport

December 2017

Campaign for Better Transport is a leading charity and environmental campaign group that promotes sustainable transport policies. Our vision is a country where communities have affordable transport that improves quality of life and protects the environment. We welcome the opportunity to contribute to the Committee's inquiry into Mobility as a Service (MaaS).

Summary

By harnessing digital technology and developing better sharing of transport information, Mobility as a Service (MaaS) provides exciting opportunities to enhance local transport provision. Well-planned MaaS can improve social inclusion, cut traffic and pollution and help reduce dependency on private car ownership, by filling gaps in existing services, and providing liberating mobility for people excluded from mainstream options.

However there is a risk that poorly-planned MaaS, with a proliferation of private services competing for a relatively agile and affluent urban customer base could simply lead to more vehicles on the road, adding to congestion and pollution, while reinforcing existing damaging patterns of social exclusion in poorer and more isolated communities.

MaaS needs good regulation and planning to maximise its potential and good integration with existing provision, sharing data and working closely with local and regional transport authorities as part of a high quality network.

To maximise the benefits of MaaS, local authorities or a lead regulated operator should have the role to oversee the development, deployment and co-ordination of MaaS provision in their area, supported by appropriate policy frameworks and funding from central Government.

Mobility as a Service

Mobility as a Service (Maas) provides exciting opportunities to enhance local transport provision. Well-planned MaaS could in principle improve social inclusion, cut traffic and pollution and help reduce dependency on private car ownership, by filling gaps in existing services, and providing liberating mobility for people excluded from mainstream options.

MaaS needs good regulation and planning to maximise its potential and good integration with existing networks. We want to see MaaS become part of the public and community transport family, sharing data and working closely with local and regional transport authorities as part of a high quality network.

We are however concerned that development of MaaS, which by definition involves holistic networks offering end-to-end journeys, is incompatible with existing public transport deregulation and fragmentation, and also competition laws that actively discourage co-operation between providers and network benefits.

We can see the potential for MaaS applications to contribute to Total Transport type approaches that see providers pool resources, and coordinate services to tackle transport poverty and connect up public transport deserts. It should complement rather than competing with existing public transport and active travel.

By capturing and pooling data on travel patterns and existing services, local authorities and their partners can better provide seamless multi-modal services, identify gaps in provision, and encourage flexible demand-response services to fill such gaps. To capture its benefits, MaaS will need to operate in a quality framework that ensures access rather than reinforcing social exclusion.

MaaS has great potential to extend the benefits of good quality public transport to groups currently excluded. Even in London, which is well served by accessible public transport, the GLA estimates that 1 in 3 people aged over have a travel-related disability or other impairment which makes it hard for them to use the public transport system. These numbers are likely to grow with an ageing population. MaaS also has potential to connect people to homes and jobs, particularly young people and people living in remote areas

There is a risk that poorly-planned MaaS, with a proliferation of private services competing for a relatively agile and affluent urban customer base could simply lead to more vehicles on the road, adding to congestion and pollution, while reinforcing existing damaging patterns of social exclusion in poorer and more isolated communities. Any model that results in more cars making more journeys would be a policy failure.

The sharing economy has potential to transform access to transport, and this can be very positive. The expansion of inexpensive dockless bike hire services to complement existing dock-based schemes is proving popular in London, where responsible operators are reaching agreements with individual Borough Councils on how their schemes will be managed. Car clubs also have proven potential, with evidence from the annual Carplus survey that they reduce private car ownership and overall vehicle use.

However the picture for deregulated, demand-responsive private hire and car pool services is very different. The tests for such offers should be whether they reduce or increase car use, and whether they fill gaps in the network or undermine it.

Without regulation, such services can have a negative impact on modal shift by encouraging their customers to see car use as a first choice - quick, easy, cheap. Evidence from the US reinforces the concern that such services can undermine modal shift. It found that without services such as Uber and Lyft, up to 61 percent of trips either would have been by public transport, bike, or on foot, or would not have been made at all.¹

Without local co-ordination, such services can have a negative impact on the wider city transport ecosystem. Increasing congestion makes bus services – vital for low income workers and isolated communities - less attractive. As more affluent passengers switch to relatively inexpensive deregulated car services, there will be a further loss of fare income and growing congestion, a vicious circle.

It is important to ensure that any MaaS business model does not simply encourages drivers to chase jobs in high fare areas, creating congestion in busy and affluent areas rather than going to outlying areas where there is less good public transport and they would fulfil a need.

¹ Bruce Schaller: UNSUSTAINABLE? The Growth of App-Based Ride Services and Traffic, Travel and the Future of New York City (2017)

The Protocol for Liveable Cities, developed by Robin Chase and the US network Osmosys, proposes a framework to avoid the risk that an unregulated approach would lead to more congestion and worsening economic and social outcomes.²

It sets policy requirements for autonomous vehicle and MaaS offers that include:

- a requirement to use low or zero emission vehicles
- use of standard open APIs (application program interfaces)
- shared or regulated fleet in dense urban areas to avoid duplication and congestion
- a joined up approach with the planning system to better transport with location of homes and jobs.

For us to have healthy cities, healthy communities and a healthy planet, MaaS needs to help reduce car dependency, not enable more of it. Successful Mobility as a Service offers will build on multi-modal provision, rather than an over reliance on autonomous cars. That means bringing MaaS into the sustainable transport hierarchy: reduce demand, widen travel choice, maximise efficiency, and make additional traffic a last resort.

The experience of the Local Sustainable Transport Fund is that by funding good quality local transport, promoting modal shift and actively engaging in travel demand management programmes, it is possible to change travel behaviour so as to tackle congestion, maximise efficient use of the network and reduce the pressure for costly additional road capacity.³ This approach should underpin any MaaS offer.

Global evidence to date

Full-fledged Mobility as a Service, with demand responsive services for customers, and data driven service design by operators, is still an emerging concept: despite much discussion, there are few fully-integrated examples.

The WHIM app, developed in Helsinki, is the closest to a fully integrated offer, covering public transport, taxi, car share and bike hire, with a single app, available on a prepay or pay as you go model, similar to a mobile phone package. The developers have made the APIs available on an open data platform.⁴ The WHIM app, using the Helsinki software, is now being developed for use in the West Midlands city region.

Oxford City Council and Oxfordshire County Council are developing a common platform with transport operators including Great Western and Chiltern Railways, the Oxford Bus Company, Transport Focus and Highways England. The project uses the Transport Graph software developed by Oxford-based Zipabout to offer journey planning, local MaaS schemes and will support delivery of local smart city and low emission zone programmes.

We would like to see these schemes studied as UK pilots with appropriate support from DfT and DCLG, so that other UK local authorities can benefit from the experience.

While there are few fully-operational MaaS models, there are existing UK projects and services which provide examples of good practice for including in a future MaaS framework.

Dial a Ride provides demand responsive transport for Londoners with disabilities, linked to a personal mobility budget, funded by Transport for London. A GLA report into Dial a Ride⁵ made the following recommendations which could usefully be applied to any MaaS service:

- Develop a customer charter, with a clear statement of the service offered
- Manage the service to avoid duplication of vehicle trips
- Co-ordinate with community transport provision

² Osmosys: Adopt the Protocol for Livable Cities

³ DfT: Impact of the Local Sustainable Transport Fund, summary report (2017)

⁴ Maas Global: mobility as a service (<http://maas.global>)

⁵ London Assembly Transport Committee: "Door-to-door transport services report" (2010)

- Monitor performance of online and telephone booking systems
- Set up customer satisfaction surveys and other independent channels for user feedback.

The Total Transport projects funded by DfT in 37 local authorities, took a cross-sector approach to the delivery of passenger transport services across health, school, and local authority transport and buses. By pooling information and resources, they were able to deliver services that are better coordinated, integrated, and more efficient⁶. MaaS services could operate similarly with potential to replace and enhance inefficient and poor quality bespoke transport services.

Researchers at the University of Northampton have taken this a stage further by pooling anonymised postcode data and travel survey responses from public sector employees to identify which routes have the greatest volume of single occupancy car commuting, and are now using that data to target car sharing schemes and potentially develop new bus routes. In London, Tower Transit has developed a new bus route based on data from CityMapper showing the most popular travel routes not already served by buses.

These virtuous circles, where data is used to provide better integrated and more sustainable services, are a positive model for MaaS to follow. There are major implications of this approach for traditional transport planning and especially for future planning of road transport demand and infrastructure. MaaS has the potential to change travel behaviour significantly, yet the models and forecasts underpinning much transport planning do not take account of this. In the Northampton case cited above, this data has been used to show how current car travel on the A45 trunk road could be reduced⁷, yet in practice on the ground road planning is dominated by forecasts largely based on continuing past travel trends into the future.

Overcoming barriers to implementation

To maximise the benefits of MaaS, local authorities or a lead regulated operator should have the role to oversee the development, deployment and co-ordination of MaaS provision in their area, supported by appropriate policy frameworks and funding from central Government.

There are technical and contractual challenges around the sharing and compatibility of data. There are many excellent examples of integrated ticketing for multi-modal end to end journeys, including the TfL Oyster card Nottingham's Robin Hood card, and Reading's EasyGo which combines car club membership and bus pass.

However the rollout of smart ticketing across the rail network in the South East was an expensive failure while in Manchester there remains a proliferation of different tickets and fares despite the promise of a smart card. The mixed experience of smart ticketing schemes shows that even where there is potential for technical compatibility, the structure of service contracts and problems agreeing an allocation of fares, seamless multimodal ticketing has not been offered. Developing solutions to these challenges is a far more important area for technological development to improve future MaaS offers than the current focus on autonomous vehicles.

Indeed the current structure and regulation of the public transport industry, and of taxis and private hire vehicles, will have to change substantially if the full benefits of MaaS are to be realised. A deregulated and fragmented public transport industry, in which all the incentives are for individual operators to maximise revenue on their own services, will not be able to offer the holistic and end-to-end journey that MaaS requires. The way in which competition law has been applied to the public transport industry, seeking to maximise competition within the public transport market and between operators, also runs against the MaaS approach.

⁶ CIHT: Total Transport Pilot event

⁷ Campaign for Better Transport: Towards the second Road Investment Strategy evidence submission (September 2017) pp12-13

Fortunately, there are remedies to hand. The Bus Services Act 2017 offers powers for local authorities to create enhanced partnerships and where appropriate to franchise bus services; it also promotes joint ticketing schemes and the open sharing of the data on real time bus services and fares. We would like to see the DfT review the potential of the Act to promote MaaS.

An open data approach at both local and national level is a key requirement for delivering high quality MaaS that complements, rather than undermines, vital public and community transport. The recent open data release of the Ordnance Survey master map is welcome. Both Transport for London and Transport for the North have held 'hackathons' where independent developers can access public transport data to design new applications.

There are also capacity and resourcing challenges for local authorities. A Connectivity Fund, based on an idea proposed by the Urban Transport Group⁸, could help support MaaS services that might not otherwise be commercially viable as part of a network of local buses and community transport. Such funding would be outcome-based, rewarding operators that serve places that people need to go, could also be used to pump prime new services for access to employment and new housing.

Any pre-pay requirement for end users is likely to be a barrier for low income and other socially excluded groups, for whom MaaS may be particularly important. Integrating Freedom Passes into MaaS will be essential, and local authorities will have a key role to play in requiring accessible and affordable offers from any large scale MaaS operation in their area.

The role of central government

We see MaaS developing primarily at a sub-national level, with local transport authorities playing the lead role. However, given the many pressures on local authorities, there are vital supporting roles that central government can play.

The Government could set a draft policy framework with minimum standards for MaaS provision in an area, using DfT indexes of connectivity and accessibility to local services, to identify priority areas for MaaS support. Setting standards for data sharing by operators, and adopting an open data approach at national level (for example, expanding the sharing of traffic data from Highways England) is also vital.

The Government could provide additional financial and technical capacity for local authorities, including the Connectivity Fund proposed above, and potentially to broker cross-boundary issues. There may also be a need to review regulatory and fiscal frameworks, as local authorities identify barriers to MaaS implementation, and, as above, review Bus Services Act and other public transport and taxi regulation to ensure that it supports rather than undermines MaaS

In addition, we see potential for Government to include provision for MaaS in national policy and programmes, for example:

- require MaaS compatibility in future rail franchises
- advise on integrating MaaS with Clean Air Zones
- include access to MaaS in the Digital Inclusion and Social Mobility strategies.

However, this will require changes in Government thinking. For example, reform of the rail fares system to make it simpler and fairer has been held up by the Government and the rail industry's failure to agree terms

⁸ Urban Transport Group: "Making the connections: The cross-sector benefits of supporting bus services"

for pilots for reform. Yet such reforms will be essential to make the rail network and integral part of MaaS offers. The technology for this to happen is available now, as a recent blog for our website pointed out⁹.

Underlying the failure to reform the fares system is reliance on old modelling of fares revenue and fear by DfT and operators of losing revenue from reform. The Government should conduct a review of public transport fares and ticketing in the light of the potential for MaaS and learning from the advances in London and elsewhere.

Overcoming concerns about digital exclusion

There are legitimate concerns about digital exclusion. Those sectors of the community most likely to be excluded from digital services are also those likely most in need of accessible transport services, that is older people, people in low income households, and people with disabilities, as well as people living in more isolated areas.

The Social Mobility Commission recently reported on the problems faced by people in “social mobility coldspots” accessing good jobs, with such areas typically having multiple challenges, including high transport costs, poor connectivity, and low access to digital technology.¹⁰

If MaaS is to serve more than the agile and the affluent, then it is vital that there are options to access services by phone or in person, or via a third party who can access the online service on behalf of the end user or assist them to do so. This strengthens the case for local authorities, or a regulated lead operator, to have an overarching role in MaaS provision in their area.

The Government’s Digital Inclusion Strategy identifies libraries and the NHS as having a critical role to play in delivering improved digital access for vulnerable groups.¹¹ It is vital that they have sufficient funding to provide such services. It would be a grave failure of policy if a service designed to increase transport connectivity for all failed to reach those most in need.

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Campaign for Better Transport

Campaign for Better Transport’s vision is a country where communities have affordable transport that improves quality of life and protects the environment. Achieving our vision requires substantial changes to UK transport policy which we aim to achieve by providing well-researched, practical solutions that gain support from both decision-makers and the public.

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⁹ Andrew Steele: “What’s wrong with that old orange cardboard rail ticket?” (Campaign for Better Transport, 2017)

¹⁰ Social Mobility Commission report: “State of the Nation 2017: Social Mobility in Great Britain”

¹¹ DCMS: “UK Digital Strategy” March 2017