

Report to: Transport Committee

Date: 16 March 2018

Subject: **Mobility As A Service**

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Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	

1 Purpose of this report

- 1.1 To provide the Transport Committee with an update on strategy work undertaken to date and to request endorsement of the proposed forward work plan on Mobility as a Service.

2 Information

Definition of Mobility as a Service

- 2.1 In order for the Combined Authority to deliver the agreed savings against the current financial levy spend, it is essential that new and innovative ways of providing transport services, payment and journey planning are explored which will allow both supported and commercial transport services to be provided at a lower cost than is currently possible. The development of Mobility as a Service (MaaS) is one of the important components of this future transport provision.
- 2.2 MaaS is the provision of integrated travel options, linking all modes together to make an easy alternative to the private car. This service is usually provided through a user interface (either an app or a website) that allows users to plan, book and pay for their travel through a single mobility account. This app would

help to improve access to existing transport modes but in order to make this possible it will require some changes to our service provision.

- 2.3 In the future, users will also be able to purchase ‘bundles’ of different travel services, from their home (via the web) or on the go (via their smartphone). Users will be able to select a package of different transport options in a similar way to how subscription television services are currently offered. This might include bus and rail services, taxi, car club and cycle hire, for example.
- 2.4 MaaS harnesses the technologies of live travel information and user interface (smartphone, tablet) to offer a reliable and flexible transport service that dynamically adjusts to user needs and traffic conditions. It also potentially creates capital and revenue efficiencies for the operator/funder. MaaS also has the ability to help support the budget savings required to the tendered bus service budget up to 2021, as set out in the January report to Transport Committee on Business Planning. It will be important to consider new and innovative ways in which these services can be delivered to those who need it, including through the aggregation of transport services via an app.
- 2.5 Over the coming decade, the ways in which transport services are provided will change. This will be driven by innovations in vehicle technology including autonomous vehicles (AVs), payment technologies including contactless and new forms of delivering transport services through mobile apps such as Uber and Ofo. These innovations will change and will disrupt established patterns of demand for transport and the traditional business models that support it.
- 2.6 The development of a MaaS app will also enable the aggregation of demand for transport services which might in some locations enable transport to be provided by more innovative means. For example if sufficient people register a need to travel from A to B this could stimulate a provider to operate a “crowd funded” bus service.

Policy Context

- 2.7 The MaaS sector is developing at a fast pace and other Cities and public authorities both in the UK and Europe are starting to develop pilots to test different ways of delivering MaaS. The UK Government is currently developing its policy on MaaS and has recently opened an Inquiry and call for evidence¹ to gather global experiences on MaaS to date and to understand the barriers to implementation of MaaS and how these can be addressed. This evidence will help to shape the Government’s role in the development of MaaS going forwards. The Combined Authority plans to submit written evidence to the Inquiry in due course and this will be presented to the Committee at a future meeting.

¹ <https://www.parliament.uk/business/committees/committees-a-z/commons-select/transport-committee/inquiries/parliament-2017/mobility-as-a-service-17-19/>

- 2.8 Officers are also actively engaged in dialogue with other cities to understand current best practice and plan to bring a summary of experiences from elsewhere to a future Transport Committee meeting.
- 2.9 The development of a MaaS offer that enables customers to purchase travel through a mobility account is one of the commitments set out in the West Yorkshire Transport Strategy². The emerging Local Inclusive Industrial Strategy has inclusive growth at its core and MaaS could play an important role in delivering this objective.
- 2.10 The strategic priorities outlined in the Strategic Economic Plan (SEP) could be supported by MaaS – particularly the ‘growing business’ and ‘infrastructure for growth’ objectives. In addition, MaaS can also help to deliver the following policy priorities:
- a) **Delivering agreed savings against current financial levy spend³** - MaaS has the potential to help achieve committed financial savings particularly for tendered bus services by helping to aggregate demand and ensure that best use is being made of existing vehicle assets.
 - b) **Improving connectivity** - MaaS can help to improve transport connectivity by enabling the planning of multi-modal journeys and also payment through a single mobility account. One of the key themes in the SEP is improving access to jobs – the development of MaaS would work alongside plans to develop M Card usage and promote transport options for job seekers. Delivery of MaaS is also seen as an essential component of the Leeds City Region HS2 Connectivity Strategy⁴.
 - c) **Delivering inclusive growth** – The application of MaaS to improving access to employment for rural or disadvantaged communities can help to deliver transport services in new or innovative ways. This can help to achieve the inclusive growth ambitions set out in the emerging Local Inclusive Industrial Strategy and the West Yorkshire Transport Strategy⁵.
 - d) **Incentivising sustainable travel behaviour** - A MaaS application could help to incentivise sustainable travel behaviour – contributing to improved health and quality of life as outlined in the SEP’s Transformative Vision *“to be a globally recognised economy where good growth delivers high levels of prosperity, jobs and quality of life for everyone⁶”*
 - e) **Improve levels of bus usage** - MaaS will help to tackle the challenges customers face in making complex journeys in West Yorkshire’s de-regulated bus market, which can be difficult given the complex ticketing

² Page 47 (policy 52)

³ See the January 2018 report “2018/19 Revenue Budget Implications for Service Delivery”

⁴ Leeds City Region HS2 Connectivity Strategy – draft January 2018 (pg. 15)

⁵ Page 31 (policies 1 – 4 and 5)

⁶ West Yorkshire Transport Strategy 2040 pg. 49

system. It can help to ensure that customers can purchase the most appropriate ticket for their journey and also can assist customers in understanding unfamiliar route options. MaaS may also have a role in developing a more efficient means of maintaining local accessibility to the current subsidised bus provision.

- f) **Partnership working with new technology** – Uber and similar services have become popular because they are responsive to customer needs. However the additional traffic congestion which could arise from their continued growth would suggest that a MaaS offer which integrates all modes of transport would be more effective in meeting the Combined Authority’s strategic objectives.
- g) **Providing services to communities that are hard to reach** – MaaS and the provision of on demand services that aggregate demand can help to provide bus and other demand responsive services for communities where it is difficult to make the case for providing scheduled bus services.

Progress to Date

- 2.11 There are a number of components that need to be developed in order to achieve the vision of providing an integrated user interface for MaaS. Progress achieved to date is described below.

Smart Ticketing

- 2.12 The continued development of the smart multi modal MCard ticketing scheme has largely been card based. Recent MCard achievements are outlined in the box below. The recent launch of the MCard android app has resulted in a move by customers to use their phones to top up their cards. Bus operators have launched mobile phone ticketing in the last 18 months and are reporting a growing migration from cash to pre purchased mobile phone ticketing. However, there will always be a proportion of the population who do not have access to smartphones (15% of the population in 2017⁷). MCard use is particularly strong amongst under 19s who are unlikely to have contactless bank cards. MCard products are already being integrated into mobile apps and would offer a key component to MaaS.

MCard key achievements

- 200,000 different smartcard customers per week travelling on MCard
- £30m of products are sold on MCard per year, including day, week, month, term and annual tickets.

⁷ Smartphone penetration by age group – Deloitte Global Mobile Consumer Survey, 2017
<https://www.deloitte.co.uk/mobileuk/>

- Customers “tap” their smartcards 1.2 million times a week in West Yorkshire, they are accepted on all bus and rail operators, making it the most extensive and well used smartcard system outside of London.

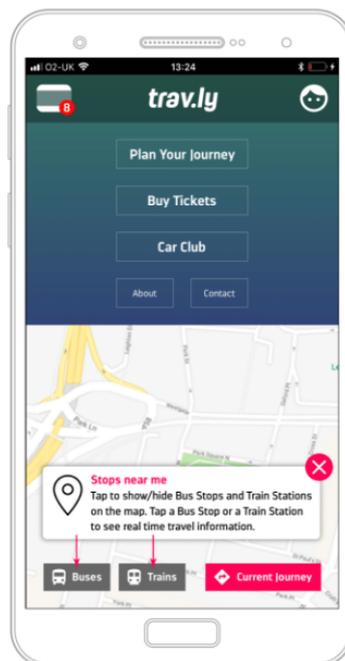
- Job Centre Plus issue £500,000 worth of MCards to jobseekers every year⁸.

The MCard android app is first of its kind to enable smartcard top up. In less than six months, customers have spent in excess of £500,000 topping up their cards and more than 7% of all sales have been placed via the app.

Development of MaaS app

2.13 The Combined Authority along with O2 and First have been partners in the development of an Innovate UK funded app called trav.ly. Trav.ly has already undertaken a closed trial which was used as proof of concept and enabled a small user group to sign up and purchase park and ride tickets via the app (see screenshot below). Initially trav.ly is aimed at the occasional public transport user who would make an “impulse” ticket purchase when they make a journey enquiry. There is potential to expand the available ticket products on the app to enable customers to pre purchase bundles of day tickets or season tickets.

Screenshot of the Trav.ly app



2.14 Whilst trav.ly offers opportunities to develop an embryonic MaaS offer, it will join a competitive market. There is already a proliferation of travel apps offered by transport providers such as First and Arriva and independent app

⁸ Funded by Job Centre Plus with a reduction offered on these tickets by TICCO

developers. Bus operators are investing in apps to maintain market share whilst the commercial case for app developers is in the commission charged in selling the product. West Yorkshire Ticketing Company will review sales of tickets through trav.ly and will look at the potential to incorporate the MCard app into it.

Transport for the North Account Based Ticketing

- 2.15 Transport for the North (TfN) is currently delivering a smart ticketing programme over the next four years as outlined in its Strategic Transport Plan⁹. This work will include the roll out of smartcard ticketing for rail travel, followed by further phases of work to introduce real time customer information (including disruption messaging) and the implementation of a 'back office'. This will enable customers to use contactless bank cards to travel across multiple modes of transport across the north and pre or post pay or charge travel to an account that will then be charged at the end of the day or week. It will ensure that customers pay the best price for their travel on public transport.
- 2.16 The creation of customer accounts would be a key component of MaaS if those accounts could also offer payment for other modes such as car clubs, taxis, cycle hire etc. The TfN project is creating a back office however the customer relationship would be with the transport provider or ticketing company i.e. the customer registers with the most appropriate provider that meets their needs and is supported by the TfN back office. It is likely that MCard would be one such provider.

Personalised Transport

- 2.17 The initiatives described above are largely innovations in ticketing on established modes of public transport and will support the retention and growth in customers using these modes. For MaaS to support bookable personalised transport, it will need to offer a booking and scheduling functionality. Private hire apps including Uber do this by matching customer requests with available vehicles using mapping tools. The Combined Authority uses software with this functionality to support its AccessBus service and will shortly extend this into education transport services. At present this is not customer facing however the suppliers are able to develop app functionality available for use on pilot projects.

Next Steps

- 2.18 The key next steps are as follows:

Continue to work with TfN to develop an account based offer to customers in the City Region.

⁹ Strategic Transport Plan – draft for public consultation, Transport for the North 2018 (pg. 58)

- 2.19 The CA will continue to work closely with TfN and other partners to ensure that wherever possible proposed developments are integrated with both the MCard and Trav.ly. Where relevant, the introduction of additional ticketing products onto the MCard will be considered.

Develop existing booking and scheduling software to support personalised transport pilot projects with a view to integrate this into a MaaS offer

- 2.20 In order to examine how MaaS can help achieve efficiencies in provision of transport services and improvements to the user experience, a series of small scale pilot projects are planned for 2018. Specifications for these projects are still being developed but these might include testing out alternative methods of delivering bus services in areas where commercial services are not currently viable; aggregating demand for Access Bus and other on demand services through a central point to enable community transport vehicles to achieve better utilisation throughout the day; and development of a partnership between community transport operators and car club operators to enable community transport vehicles to be booked online and accessed using a smartcard. There is some funding within the Leeds Public Transport Improvement Programme that could be used to fund a suitable pilot as part of the Connecting Communities project in Leeds. Engagement will take place on the proposed pilots so that there is an opportunity for discussion and approval on the options available.

- 2.21 Other funding opportunities for further pilots will be identified, particularly over the next six months, through both existing projects and external funding competitions.

Support the development of Trav.ly as mobile ticketing platform for MCard and explore potential to integrate other modes

- 2.22 Trav.ly app will launch to the public on android and iphone in March/April 2018, with MCard bus day saver tickets being offered in addition to park and ride tickets. In the future there will be opportunities to add modes to the trav.ly app – this might include Ofo cycle hire and taxi. Car club vehicles are already shown on the map on Trav.ly but there is potential for increased integration to be developed in the future.

Develop and grow the MCard customer base as a key market for MaaS product development

- 2.23 The West Yorkshire Ticketing Company of which the Combined Authority is a partner will continue to develop and grow the MCard. The feasibility of extending the MCard app to the iPhone is under consideration. Under the Bus 18 initiative, steps are being taken to integrate bus operator only tickets onto the MCard to ensure there is only one smart ticketing platform in the region.

Keeping up to date with MaaS

- 2.24 The CA will start to engage more actively with existing stakeholder groups (for example Bus 18) and consult with industry experts over the coming months as the MaaS work programme becomes more developed. The Committee will be kept up to date with these developments. We ask the Committee to endorse this approach.

3 Financial Implications

- 3.1 There are no financial implications directly arising from this report.

4 Legal Implications

- 4.1 There are no legal implications directly arising from this report.

5 Staffing Implications

- 5.1 There are no staffing implications directly arising from this report.

6 External Consultees

- 6.1 External consultees are to be developed as the project progresses. These will include (but not be limited to): Transport for the North, bus, car club and rail operators, West Yorkshire Districts.

7 Recommendations

- 7.1 The Committee is recommended to endorse the next steps outlined in section five.

8 Background Documents

None.

9 Appendices

None.