



## Board Meeting

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| <b>Date</b>                                    | 19 August 2016   |
| <b>Report title</b>                            | Smart Ticketing  |
| <b>Cabinet Member<br/>Portfolio Lead</b>       | Councillor Roger Lawrence – Transport  |
| <b>Accountable Chief<br/>Executive</b>         | Keith Ireland, Clerk to the Combined Authority<br>Tel: 01902 554500<br>Email: <a href="mailto:Keith.Ireland@wolverhampton.gov.uk">Keith.Ireland@wolverhampton.gov.uk</a> |
| <b>Accountable<br/>employee(s)</b>             | Matt Lewis, Head of Swift, TfWM<br>Email: <a href="mailto:mattlewis@centro.org.uk">mattlewis@centro.org.uk</a>   |
| <b>Report to be/has<br/>been considered by</b> | Strategic Transport Officers Group<br>(25 <sup>th</sup> July 2016)   |

### Recommendation(s) for action or decision:

#### The Combined Authority Board is recommended to:

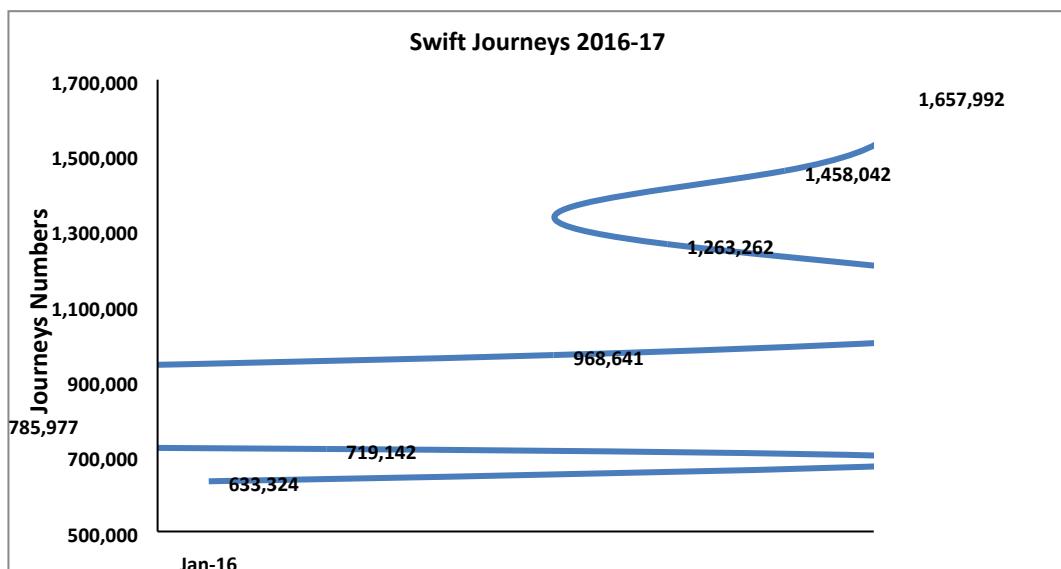
1. Approve that the Swift Programme Board is disbanded and a new Board is set up with a wider remit to include maximising opportunities available through the smart data and payment for; access to the broader mobility options. This Board will be chaired by Keith Ireland who is the regional lead Chief Executive for Transport in the West Midlands area covered by TfWM.
2. Approve that the remaining products and functions within the Swift Programme are delivered through a Task and Finish Group under the direction of the new Board.
3. Approve that the new Board commissions a detailed review of the available and emerging contactless back office opportunities including the development of a costed option to work with Transport for London.

## 1.0 Purpose

- 1.1 To update the WMCA on the progress made towards achieving its objectives around smart and contactless ticketing, setting out the successes achieved to date and to also highlight known challenges that will need to be overcome for further delivery.

## 2.0 Swift smart ticketing – delivered to date

- 2.1 The TfWM Swift smartcard scheme is now the largest and most successful scheme outside of London with the greatest range of available tickets, most extensive retail solution and exponential growth in the number of passengers using it. The graph below outlines the significant growth in Swift usage since January:



- 2.2 The table below outlines some key facts and statistics that highlights this continued growth and details some of the key reasons behind why this has been achieved:

| Key Fact | Details  |
|----------|--|
| 1        | In July 2016 there were a total of 1.6m journeys made using a Swift card, this has grown from 630k journeys in January 2016 an increase of 154% in just 7 months   |
| 2        | Swift Pay-as-you-go customers save 20p when they use their card to purchase a day ticket or 10p for every journey they make if they purchase single tickets.   |
| 3        | Swift Pay-as-you-go customers can ensure they never run out of money by linking their bank account to their Swift card. This is really popular with 18% of all Pay-as-you-go sales made through this function. |
| 4        | Swift customers can purchase tickets or Pay-as-you-go credit   |

|    |  |
|----|--|
|    | on-line and collect their purchase through their mobile phone (Android only) or an on-street reader. This has revolutionised the retail offer with 23% of all Swift tickets now sold on line compared to less than 1% of prior to the introduction of Swift.   |
| 5  | Prior to the introduction of Swift, if a customer lost their season ticket, they would have to buy a new one at full price as there was no record of their initial purchase. Through Swift, we now have a record of the purchase and the customer's usage and can therefore replace any lost tickets.              |
| 6  | Through Swift, we also know where a customer boards a bus and as such we have been able to introduce area specific ticketing for both Coventry and the Black Country. Those using these tickets are saving £120 and £85 per annum respectively compared to the limited ticket range that was previously available. |
| 7  | The introduction of the multimodal nNetwork ticket means that Swift card customers can now travel across bus, train and the Metro using a single smart card. TfWM is the first to deliver a truly smart multimodal ticketing solution on an open technology platform <sup>1</sup>                                  |
| 8  | The e-Daysaver on Swift allows customers to buy 5, 10 or 15 day tickets in advance of their travel for use whenever they like. This is perfect for part-time workers as it's flexible and cheaper than buying individual day tickets on the day of travel.   |
| 9  | The data we received from Swift has enabled us to improve our auditing and fraud prevention methods and through this we have gained the confidence of partners to enable the wider rollout of ticket types.  |
| 10 | Swift is moving towards achieving commercial sustainability as operators pay 2.5% commission to use the Swift platform.  |

### 3.0 Swift smart ticketing – to be delivered

- 3.1 The table in Appendix A sets out the tickets that have been delivered to date, the modes for which they are accepted and the available retail channels. As can be seen from this table, the current offer is substantial and the remaining Swift Programme is, in essence, focusing on the turning the crosses within the table into ticks. However, there are some significant gaps particularly in the area of tickets available across the rail network, child ticketing more widely and the delivery of best value capping. These challenges are highlighted in more detail below:

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<sup>1</sup> Swift uses the ITSO standard for smart ticketing which is open and therefore interoperable with other schemes such as those delivered in Nottingham, Leicester and Derby. The Oystercard scheme is a proprietary solution that cannot be used with any other schemes.

#### **4.0 Swift on rail**

- 4.1 TfWM has worked closely with London Midland and the DfT to deliver the multimodal nNetwork ticket onto the Swift platform, however, it is currently only available to direct debit customers. The limitation to just direct debit customers is for the following two reasons:
- The wider rail retail network, such as booking offices and vending machines do not currently have the capability to issue or validate smart tickets.
  - Whilst there are now smart ticketing gates at New Street and six other key stations, there is no capable validation equipment at any other station.
- 4.2 TfWM is working closely with the DfT, West Midlands Rail and Midlands Connect to ensure that this functionality is delivered going forwards; either through franchise commitments or via other available funding opportunities.
- 4.3 In the meantime, TfWM is focusing on the rollout of further direct debit tickets with the train only season ticket (nTrain) likely to be available on Swift in early 2017.

#### **5.0 Child ticketing on Swift**

- 5.1 There are a number of complexities involved in delivering child ticketing onto Swift, most of which have now been overcome. However, the following two issues remain a challenge:
- There are a number of child ticketing policies that should be reviewed prior to finalising the design of the Swift solutions, these policies include:
    - The validation process – currently voluntary for those under 16 and mandatory for those between the ages of 16-18.
    - The availability of the child concession - currently available for those aged 16-18 who are in full time education. However, all those aged under 18 are now required to be in education or training.
  - The half fare child concession is valid for journeys to and from school and at any other time when the journey is for academic purposes. It is technically challenging to deliver a solution that will differentiate journeys outside of school time as been for academic purposes or any other purpose.
- 5.2 The delivery of child ticketing is earmarked for the start of the 2017 academic year and as such TfWM has planned in time to tackle these challenges with work beginning imminently.

## 6.0 Swift Pay-as-you-go capping

- 6.1 The delivery of a best value daily cap as an enhancement of Swift Pay-as-you-go will bring all of the benefits of the Oystercard to the West Midlands for a fraction of the costs paid by TfL<sup>2</sup>.
- 6.2 There are two methods available to deliver this onto the Swift platform. The first of these methods uses intelligence within the card and the ticket machines to ensure a best value daily cap. The second method holds all of the intelligence in a back office where a user's journeys are aggregated at the end of the day and the best price is charged.
- 6.3 The first method has been successfully deployed in Nottingham with their Robin Hood card and would be relatively straight forward to replicate in the West Midlands, albeit the ticket machines would require an update. This method would provide the speediest and most cost efficient way to deliver capping for TfWM.
- 6.4 However, whilst the second method is likely to take longer to deliver, it would provide a capping solution that works with both Swift Pay-as-you-go and contactless bank cards and as such provide a true replica of the TfL experience.
- 6.5 National Express has recently committed to purchase the back office required to deliver the second method and are working closely with TfWM to ensure that it is an interoperable solution that can be used by other operators and modes when it is delivered.
- 6.6 However, it is estimated that it will take two years to deliver this solution and as such there may still be some value in working to deliver a "first method" offer as an interim step if that can be delivered quickly and in a cost effective manner. This will be discussed at the next Bus Alliance meeting.
- 6.7 It is recommended that these final developments for Swift are set up and delivered through a Task and Finish Group.

## 7.0 Contactless ticketing – delivered to date

- 7.1 National Express rolled out a contactless payment solution on the Metro in June, using the cash replacement method which enables the use of a contactless bank card as payment for the fare.
- 7.2 National Express has also just appointed a new Electronic Ticket Machine (ETM) supplier (INIT) and a key part of the selection process was the acceptance of contactless cards, using both the cash replacement and the back office capping method. NXWM announced on 29 June that they expect contactless payment to be live on the 1 route in Coventry by the end of 2017, with functionality rolled out across the region within two years.
- 7.3 Contactless ticketing will bring great benefits to the West Midlands making it easier for users and non-users to access transport but it is in its infancy and there are a

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<sup>2</sup> DfT estimates that TfL have spent more than £1bn on the development and operation of the Oystercard.

number of challenges to tackle before it is suitable for wide deployment in a deregulated environment such as that which exists in the West Midlands. The table below lists out some facts, statistics and a number of known challenges that need to be tackled before wider delivery:

| Key Facts | Details  |
|-----------|--|
| 1         | Contactless payment has been really successful on the Midland Metro with 7% of all tickets sold on-tram purchased using a contactless card.  |
| 2         | The 5 biggest bus operators have made a commitment to the DfT to deliver contactless ticketing by 2022. Their commitment includes developing a back office that will be available to all bus operators   |
| 3         | Rail Delivery Group has also committed to deliver contactless payment for the rail network by 2022 meaning that all modes should have a contactless solution   |
| 4         | The UK Cards Association estimates that 20% of cards issued will never have the contactless function as the risk profile of the customer is too high.  |
| 5         | Contactless cards are not issued to children under the age of 14 and very few are issued to children over this age.  |
| 6         | Issuing banks currently insist that cards are only used as part of a payment transaction meaning that this is not currently an acceptable method for free concessionary travel schemes or for group travel where only one person makes the payment but a group of people need to travel through a ticket barrier for example   |
| 7         | All Merchant Acquiring Banks have different security encryption methods for the transfer of financial data and as such if bus operators have a different Merchant Acquiring Bank from rail operators then it will be impossible to know that a single traveller has made a journey on both the bus and the train making integrated ticketing in a single back office impossible. |

- 7.4 TfWM is working closely with the UK Cards Association and the DfT to tackle the issues mentioned in the table above.
- 7.5 TfL has tackled the issues set out in items 4, 5 and 6 above through its acceptance that Contactless bank cards will not replace the Oystercard, they will in fact, work together with Oystercard filling the gaps where Contactless falls short. A similar acceptance for the WMCA would also alleviate these challenges.
- 7.6 For item 7, TfL is the sole provider of public transport in London and as such has a single Merchant Acquiring Bank, meaning that this is not an issue in London. However, in the West Midlands, where public transport is deregulated, it is a genuine concern, as failure to resolve this issue would prevent the delivery of an effective multimodal cap for contactless customers unless by chance or design, rail operators and bus operators appoint the same Merchant Acquirer or use the same back office.
- 7.7 UK Cards Association is exploring options to resolve this issue but to-date there is

no solution other than a single Merchant Acquirer or single back office and on this basis it is important that TfWM works closely with back office providers including TfL to establish the feasibility of delivery for our region.

## **8.0 Wider opportunities – Data, Bike Hire, Car Parking, Park & Ride**

- 8.1 Now that Swift is an established solution, it is important that we look to maximise the current benefits and the further benefits that will be delivered through contactless payment.
- 8.2 For example, the data from Swift journeys is already used to allow us to improve our operational management of the schemes including improvements to our audit arrangements. We have also used this data to help predict customer contact volumes to ensure that our Centre's are adequately staffed and that our commission charge to operators is enough to cover these extra costs.
- 8.3 However, in order to drive this further forward we need to develop tools and methods to enable more creative analysis that will allow TfWM and its partners to determine an optimum route network, new and innovative ticketing and new insights to support enhanced marketing that can be targeted in accordance with trends identified within the data.
- 8.4 There is also an opportunity to expand into the wider mobility agenda, bringing Swift and contactless payment into car parking, car sharing or bike hire for example.

## **9.0 Mobility as a Service**

- 9.1 TfWM will also support integrating payments into a single service for mobility – supporting the development of what is known as “Mobility as a Service” (MaaS). MaaS is the provision of transport via a real-time personalised service model that integrates all types of mobility choices and presents them to the customer in a completely integrated manner to get them from A to B as easily as possible.
- 9.2 At the heart of MaaS is the enabling of every user to have a better journey experience than they currently experience. This is achieved by offering users the ability to buy a service from a MaaS provider that ‘looks after them’ at all stages of their journey. This is a key shift from the block provision of transport, to a much more flexible and customer-centred means of providing mobility in a managed way.
- 9.3 WMITA received a report on 18<sup>th</sup> March 2016 – West Midlands Intelligent Mobility Policy. This report asked TfWM to investigate the development of a pilot product for Mobility as a Service during 2016/7. TfWM officers have been investigating the potential of a pilot project with a range of partners, and are in the process of setting up a consortium of partners who are willing to participate in a pilot project. It is anticipated that the pilot will be market driven and therefore fully funded by the private sector, with TfWM and other public sector partners operating as facilitators and enablers rather than funders of the project.

- 9.4 Therefore, in order to ensure that there is a new wider focus to the Swift and contactless deliverables it is suggested that a new Programme Board should be established to replace the current Swift Programme Board and that this new board would be chaired by Keith Ireland the WMCA Monitoring Officer.

## **10.0 Financial implications**

- 10.1 There are no direct financial implications to this report which seeks to replace the current Swift Programme Board with new Board arrangements. In terms of Swift funding, current capital and revenue budgets will support the roll-out of planned Swift products this Financial Year as well as Child ticketing in 2017/18.
- 10.2 WMCA is currently awaiting clarification on funding availability from the DfT and Smart Cities in order to roll out nTrain on Direct Debit and further funding will need to be identified to take forward development of capping and contactless payment which are currently not within the costed project plan. Given the similar ambitions of Swift and other initiatives such as Mobility as a Service and Midlands Connect, there may be funding opportunities available which need to be explored.

## **11.0 Legal implications**

- 11.1 As identified in the body of this report, in the current deregulated environment that prevails within the West Midlands, the wider aspirations related to the development and deployment of contactless technology in terms of the full range of possible applications moving forward, may be restricted by the current operating model and therefore continued efforts will need to be made to find a suitable solution to unlock the full potential of Contactless within the West Midlands.

## **12.0 Equalities implications**

- 12.1 There are no equalities implications associated with the recommendations set out within this report.

## **13.0 Other implications**

- 13.1 There are no further implications associated with the recommendations set out within this report.

## **14.0 Schedule of background papers**

- 14.1 None.

## APPENDIX A – Swift Delivery Table