

Digital Payment for Travel Strategy

December 2018

Draft strategy



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Digital Payment for Travel Strategy

1. Introduction to West Yorkshire Combined Authority

West Yorkshire Combined Authority covers the 10 districts of Barnsley, Bradford, Calderdale, Craven, Harrogate, Kirklees, Leeds, Selby, Wakefield and York – an area known collectively as Leeds City Region.

We work in partnership with local councils and businesses to ensure that everyone in our region benefits from a strong, successful economy and a modern, accessible transport network.

By championing the region's interests nationally and internationally we secure investment to deliver better transport and housing, help businesses to grow and create jobs.

We focus on:

- Inclusive growth – ensuring that economic growth leads to opportunities for all who live and work in our region to prosper;
- Productivity – helping businesses to grow;
- 21st Century transport – creating modern, efficient transport infrastructure; and
- Devolution – securing funding and powers to help us do even more.

We work closely with the private sector through the Leeds City Region Enterprise Partnership (LEP) to ensure that our work meets the needs of employers in the region. We also operate the Metro network of bus stations, travel centres and public transport information in West Yorkshire.

The Combined Authority (CA) works closely with the West Yorkshire Ticketing Company Ltd (WYTCL) to develop the MCard multi operator ticketing offer in West Yorkshire. WYTCL is a Joint Venture Company owned by the bus and rail operators of West Yorkshire and the Combined Authority. WYTCL establishes the ticket products, price, promotion, retail activity and the distribution of sales revenue as prescribed in the Joint Venture Agreement between its members (including the Combined Authority). WYTCL have developed the MCard strategy and plan 2019- 2021 which sets out the key strategic objectives and projects to deliver the objectives. Key objectives include:

- Increase patronage
- Be smart- convert remaining paper tickets to smart tickets
- Stimulate off bus pre-payment with an enhanced retail network and flexible payment options

Our Digital Payment for Travel Strategy has been developed to integrate with the WYTCL/ MCard strategy proposals outlined above whilst ensuring that the Combined Authority also provides a strategic direction of travel for all travel tickets, payments and operators for all public transport trips to deliver patronage growth.

Many local bus and rail services are operated on a commercial basis by private companies/ operators. MCard is the partnership which brings together those operators and provides multi-operator tickets which makes it easier to travel seamlessly across different

companies services on one ticket. Through Transport for the North's Integrated and Smart Ticketing (IST) project, Northern are in the process of converting season ticket products to ITSO smart.

Many services are operated by private companies who also offer their own range of tickets and the Combined Authority has less of an influence over these tickets and services. However, the Combined Authority does seek to work in partnership with operators, particularly on many joint projects and initiatives to improve the transport network. Hence, the Combined Authority sets its own strategy and objectives, in consultation with operators, however it cannot for example set fares or run services.

2. Local context and scope of this strategy

The way in which people travel is changing. Over the past five years there has been a change in the bus travel trends which has included growth in the journeys made by young people, set against an overall decline in levels of bus patronage and a 96% increase in rail travel over the period 2004/5 – 2014/15¹. How people wish to pay for travel is changing too. The West Yorkshire Tracker survey has shown that more people than ever before own a smartphone and use it to access internet content – in West Yorkshire all respondents to the survey aged 16-44 had access to a mobile phone and about 95% had internet access via a mobile phone².

This Digital Payment for Travel strategy replaces the previous Retail Strategy (2014-2019) and sits alongside the West Yorkshire Bus Information Strategy 2018-2023. These strategies will help to deliver the key objectives of the West Yorkshire Transport Strategy 2040, particularly the target of a 25% increase in bus patronage across West Yorkshire; our emerging Inclusive Industrial Strategy; and the Leeds City Region Enterprise Partnership's Strategic Economic Plan.

The key objectives of the Digital Payment for Travel Strategy are as follows:

- **Purchase** – making it easy to buy travel;
- **Products** – ensuring the product range available fit customer needs and lifestyles; and
- **Journey** – enabling seamless pre purchase of travel.
- **Customer insight** – gaining a better understanding of how customers are travelling and where to focus future product developments.

These objectives are discussed in further detail in section 5.

The scope of this strategy is to support WYTCL in developing a wider ticketing product range that meets the objectives set out above.

3. Regional context

West Yorkshire already has what is considered to be the most advanced smart ticketing system in the UK outside London in the MCard³. The future development of the MCard as

¹ West Yorkshire Transport Strategy 2040

² West Yorkshire Tracker Survey

³ Busreinvented.com

outlined in the strategy currently being developed by WYTCL and in this document sits alongside the plans for Integrated and Smart Ticketing (IST) being developed by Transport for the North (TfN).

TfN is the organisation that is responsible for developing the strategy, direction and delivery of transformed transport systems throughout the North of England. Locally and regionally, our strategies are aligned. Regionally, Transport for the North (TfN) will deliver the ability for customers to benefit from:

- The introduction of smart and integrated travel to customers by working with train companies and the Department for Transport to issue smartcard products (Tranche 1);
- The continued delivery of smart and integrated travel benefits, including enhanced real time customer information such as disruption messaging, open data sources and sharing knowledge with operators and transport authorities to identify new opportunities for collaboration (Tranche 2); and
- The implementation of a 'back office' which will enable customers to use contactless bank cards to travel on multiple modes of transport across the north. It will collate and read customer data to facilitate the capping of multi-modal, multi-operator journeys. This will ensure that customers pay the fair price for their travel on public transport (Tranche 3).

The Digital Payment for Travel Strategy has been developed to integrate with the TfN proposals outlined above and will ensure that the Combined Authority support the West Yorkshire Ticketing Company (WYTCL)⁴ in developing ticketing solutions to cater for groups for whom the TfN proposals will not provide a suitable ticketing offer. The Combined Authority will aim to support the creation of transport open data through TfN's fares and disruptions initiatives which will assist third parties such as Mobility as a Service (MaaS) suppliers to develop. The CA will aim to support the creation of a fair price promise and back office for contactless payments as way to achieve the objectives of the strategy to increase patronage by reducing the barriers of entry to travel for occasional/ non users and making the payment experience more attractive.

The roles of the other partners involved in the delivery of this Strategy are as follows:

- The Bus Alliance is the group of West Yorkshire bus operators (many of whom also sit on the WYTCL Board). The role of this group is to help deliver the objectives of the West Yorkshire Bus Strategy.
- Yorcard is the joint venture company co-owned by the Combined Authority and South Yorkshire PTE established to manage the technical infrastructure to support smart ticketing.
- The Combined Authority is currently developing a bid to the Transforming Cities Fund (TCF) which includes the development of a MaaS offer. If this bid is successful, there will be a governance structure established to deliver the projects within the bid.

Please see Section 5 below and Appendix B for further information of TfN's expected deliverables.

4. Trends that are influencing public transport usage

The ways in which people travel have changed over the past five years. There are several key trends that influence the direction of travel for digital payment and the development of this strategy.

- Mobile phone ownership continues to grow amongst all age groups together with usage of phones for accessing internet content and apps;
- Bus operators are offering alternatives to cash payment;
- Move to self-serve: more tickets being purchased through kiosks and apps;
- People are travelling less for some journey purposes (particularly leisure related travel);
- Bus travel has declined in West Yorkshire over the past eight years⁵;
- Park and Ride smart carnets have been a major element in attracting and retaining customers; and
- Changing working patterns are driving the need for ticketing product innovations.

These trends are discussed in further detail in Appendix A.

5. Key objectives for the Digital Payment for Travel Strategy

The key purpose of the Digital Payment for Travel strategy is to help achieve the patronage targets outlined within the West Yorkshire Transport Strategy and inclusive growth aspirations outlined in the Strategic Economic Plan. In order to achieve these targets the Strategy has three key objectives:

- *Objective 1 – Purchase – making it easy to buy travel;*
- *Objective 2 – Ensuring that the product range fits customer needs and lifestyles; and*
- *Objective 3 – Journey – enabling seamless pre purchase.*
- *Objective 4 – Customer Insight – gaining a better understanding of how customers are travelling and where to focus future product developments.*

Each of these objectives is discussed in detail in the following section.

Objective 1 - Purchase – making it easy to buy travel

This strategy proposes solutions be developed by WYTCL to help ensure that it becomes easier to buy travel over the next five years. This will be achieved through providing a variety of channels, some new and some existing, for ticket purchase including online, through provision of an app, websites and in person at Payzone and ticket vending machines.

Whilst new automated and self-serve channels form an important part of this future plan, the face to face purchase network remains important, particularly for users who do not have access to a mobile phone or wish to purchase travel using cash. It will also provide an option should the self-serve technological solutions fail. The travel centres may change their physical layout and way they do business in the future. Table 1 summarises the key roles of the different retail options currently available.

⁵ DfT Public Service Vehicle Survey – data from 2009/10 to 2016/17

Table 1 – Key role of the different retail outlets currently available

Retail channel	Key role
Travel centres – in bus stations	Helps ensure inclusivity as accepts cash payments, provides an option for those less confident with self-serve. Provides a useful backup if self-serve channels fail. Opportunity to transform Travel Centre model/review cost sharing arrangements with operators.
Payzone – in local shops	Helps ensure inclusivity as accepts cash payments, good for those less confident with self-serve. Provides a useful backup if self-serve channels fail. Open longer hours than travel centres, less ticket knowledge/ advice as travel centres
Ticket machines – at bus stations and rail interchanges	Provides an option for those who wish to self-serve. Open whenever the bus station or rail station is accessible.
MCard App – currently only allows smartcard top up on android phones	Provides an option for those who wish to self-serve, 24/7 so always available.

Increasingly customers are choosing to pay for travel digitally and have access to their travel ticket instantly. The Combined Authority has an aspiration to be able to provide a more integrated travel planning, booking and payment service through an app – this can be described as a ‘Mobility as a Service’ (MaaS) offer.

It is also proposed to expand the customer travel offer beyond public transport to include car or bike hire, taxi and other demand responsive modes. This requires coordination of all these modes into a MaaS offer - this would have three components:

- Offering access to a range of modes through one payment.
- Account based offering where it is possible to pay at the end of the day or purchase ‘bundles’/ monthly subscriptions of travel of different modes;
- MaaS is usually delivered through mobile technology and immediate fulfilment (this could be using barcode ticketing or the read-write function currently offered through the MCard app);

This objective will also help to improve journey times through encouraging passengers to purchase before travelling.

Technology options

There are many technology platforms which could have a place in West Yorkshire’s ticketing and payments network. However, each channel has its own operational and maintenance costs and overheads so development of a new platform needs to consider the benefits and costs. We are, however, open to developing MCard beyond a

predominantly smartcard based system and use other ticketing platforms to increase customer satisfaction and usage. This is similar to Oyster in London which has developed beyond the smartcard and now uses for example contactless debit and credit cards. The range of digital payment technologies available is summarised in Table 2.

Table 2: Payment Technologies

Technology platform	Key role/advantages/strengths
ITSO ⁶ smartcards	Invested in the equipment for over 5 years – good for providing concessionary travel and high value season ticket products where a photo is required. In the future ITSO is looking at future developments to include ITSO on smart phones, as well as smartcards
Mobile phone - NFC	Mobile phones can act as a smartcard – currently only android phones are able to do this. ITSO are exploring but it has an uncertain commercial case.
Mobile phone - barcode	Operators have developed this payment technology and are reporting strong growth – it is good for day/week tickets and instant fulfilment where no photo is required. Lower capital investment costs are generally required to develop this platform
Contactless ENV card payment	Cash alternative but limited and more recent roll out – good for infrequent users
Cashless account based	Transport for the North is developing a “post pay”, end of day, single payment with a “fair price promise”. West Yorkshire can benefit from TFN’s investment, suitable for infrequent travellers. Pre-paid, off bus options will be better for regular travellers unless accompanied with flat fares or “tap on tap off” functionality.
Cash	Will remain available as a payment option for those who prefer it, or do not have a contactless debit/ credit card. Whilst the strategy does promote a shift to other payment technologies to speed boarding, journey times and reliability, it does not advocate the withdrawal of the facility to pay cash.

Key performance indicators will be developed that help measure progress towards this objective. These will include the numbers of MCard journeys made, numbers of bus

⁶ Integrated Transport Smartcard Organisation

journeys made by under 19s and changes in MCard bus ticket sales for 19-25 year old products.

Objective 2 - Products – fits customer needs and lifestyles

The Strategy considers the ticket requirements of different customer groups through the generation of robust intelligence via easy, seamless access to ticket/smartcard data supported by insights from primary public transport customer research and the types of tickets that best suit each group, for example, more can be done to develop and promote ticketing products which suit young people, and part time workers.

The strategy will promote inclusive growth by ensuring that a range of tickets are available to users who do not have access to a smart phone or contactless card (or have one but do not wish to use it for paying for travel) is central to achieving our inclusive growth aspirations. Some people’s finances don’t suit cashless methods so there is a need to ensure that suitable payment methods exist for all user groups. This strategy **is not** proposing a cashless system of payment but one which promotes and stimulates digital payment. Consideration will be given to the range of ticketing products and retail network available for ticket purchase that are supported by the Combined Authority.

Young people are a key growth market for bus travel - recent improvements have been made to encouraging more young people to travel through the promotion of the MyDay ticket but there is still more work to be done. It will be crucial to work closely with commercial operators in the development of these products. There is also a key role for West Yorkshire Ticketing Company (who own and manage MCard) in this regard. Key considerations for this group will be: to make it easier to purchase tickets; to keep products affordable; and to make products flexible.

Ensuring that the fares available are easy to understand and helping customers to choose the best value ticket are also important. For some groups it may be appropriate to raise awareness/ promote, and where relevant develop the range of ticketing products (for example for group travel and part time workers) and make them available across all digital channels to ensure that it is easy for customers to understand which ticket is the most appropriate to purchase for their journey. Table 3 summarises the payment and ticketing products recommended for different customer groups.

Table 3 – Customer types, payment and ticketing products and recommended approaches

Type of customer	What they need	Ticket products which suit	Payment methods which suit	Recommended approach
Young Person - under 18	Happy with self-serve and Smartphone based solutions	Day, week, month and termly on smart	Parents buy and transfer ticket – unlikely to have own bank account	Add tickets e.g. MyDay to smart. Develop ways for parents to pay and send tickets
Young Person 19- 25	Happy with self-serve and Smartphone	Day, week and month on smart	Parents buy and transfer ticket – may have own	Add tickets e.g. MyDay to smart. Develop ways for

Type of customer	What they need	Ticket products which suit	Payment methods which suit	Recommended approach
	based solutions		bank account but may not have a contactless bank card.	parents to pay and send tickets
Regular Commuter (5 days a week)	Busy, need more 24/7 solutions and confident as repeat purchase	Season tickets	Self-serve, credit/ debit card and through organisations. Look to develop post pay i.e. pay once at the end of the day	Develop more smart ways to pay e.g. QR app/ responsive websites, expand direct debit options, expanded reach of the Travel Plan Network and TFN's contactless solution
Periodic commuter (3 or 4 days a week)	Busy, need more 24/7 solutions and confident as repeat purchase	Day tickets via mobile app or carnet type solution allowing purchase of tickets in blocks of 10/20 and validation on the day of use	Self-serve, credit/ debit card. Look to develop post pay i.e. pay once at the end of the day	Develop more smart ways to pay e.g. QR app/ responsive websites, expand direct debit options, expanded reach of the Travel Plan Network and TFN's contactless solution
Impulse/ occasional traveller	Will not be as familiar with options so needs instant solutions where little knowledge needed	Improved awareness of, and develop where relevant, tickets for part time travellers	Debit/ credit card, may not have a smartcard. Look to develop post pay i.e. pay once at the end of the day	Improved awareness/ develop tickets for part time workers on self-serve e.g. online platforms/ TFN's contactless solution
Families/ groups	May not be as familiar with options and needs tickets that offer value for money	Improved smart tickets for families/ groups	Debit/ credit card, may not have a smartcard. A mobile/ online solution e.g. QR/ bar code ticket.	Current group offers not available online e.g. family dayover. Make all group tickets available via online/ mobile e.g. QR/ bar code tickets
Senior/ blind and disabled concessionary holders	Some will self-serve to obtain the pass if simple to use,	Easy ways to apply for the smartcard.	Not required except for lost/ replacement cards.	Easy to use website to apply for smartcards. Refurbish travel

Type of customer	What they need	Ticket products which suit	Payment methods which suit	Recommended approach
	and need a back-up/ face to face system in case technologies fail			centres so can better deal with those who need face to face service
People without bank accounts	Options for cash ticket purchase and pre pay cards	Full range of tickets to be available	Cash, off bus purchase using cash and pre pay cards with similar features as contactless bank cards	Ensure payment by cash still possible, and develop a pre paid card solution to ensure the same ticket benefits are available to those using regular contactless bank cards

Key performance indicators will be developed that help measure progress towards this objective. These will include the number of product transactions, numbers of bus journeys made by under 19s and changes in MCard bus ticket sales for 19-25 year old products.

Objective 3 - Journey – enabling seamless pre purchase

This will include encouraging passengers to purchase tickets before travel and also encouraging use of barcode and MCard ticketing which have the potential to help improve journey times and reliability. The development of a (MaaS) app will also help make it easier for users to plan their journey then seamlessly book and pay for their journey in one place.

Whilst interactions with drivers on buses will remain important, in future these interactions will be much shorter as many passengers will no longer require confirmation of the fare payable if they have purchased a ticket before boarding.

Likewise, whilst there will be a shift to customers “self-serving”, selecting and buying tickets themselves via automated means such as the app, a physical network of shops such as travel centres will remain important to provide a backup should digital networks fail. Travel centres will be remodelled and repurposed to reflect this change in use.

We will continue to work with Transport for the North in the development of their Integrated and Smart Ticketing (IST) work stream. Areas of work include moving paper operator season tickets to smartcards, providing improved bus operator fares and disruption data, and a back office and “fair price” promise for contactless payments across initially, bus followed by rail in an end of day single payment. Where there are areas which the TfN proposals do not adequately address in terms of providing an inclusive range of tickets, the Combined Authority will work with WYTCL and operators to ensure that ticketing products are developed to address these gaps.

Key performance indicators will be developed that help measure progress towards this objective. These will include the proportion of cashless transactions, the proportions of on and off bus transactions and the numbers of MCard journeys.

Objective 4 – Customer Insight and Data Provision – accessible data for business analysts and customers

The Strategy considers the ticket requirements of different customer groups through the generation of robust intelligence via easy, seamless access to ticket/smartcard data supported by insights from primary public transport customer research and the types of tickets that best suit each group.

This objective supports the other three objectives by:

- Collating intelligence from all available data sources, including operational data and primary public transport customer research, to better understand customers purchase, product and journey choices.
- Considering how we can optimise information made available to customers to allow them to make informed purchase, product and journey choices.

Customer Insight

Insight into customer behaviours can be improved by:

- Access to data to better understand customer behaviour. For example, wider access to operators Electronic Ticket Machine (ETM) data, will lead to better understanding of ticket type demand, use and travel patterns across West Yorkshire. This will lead to the optimization of the range of ticket types, supporting Objective 2.
- When acquiring or designing new MaaS systems (technology platforms or Apps) the importance of robust, high-quality, structured and easily accessible data is considered. This data can be used to better understand customers travel behaviour, supporting Objective 1.
- Continued investment in primary public transport customer research (e.g. TRACKER survey) will help us best understand the ticket requirements and method of purchasing tickets of different customer groups, supporting Objectives 1 and 2.
- Considering the electronic capture of sale and use of new tickets we can better understand more about who and how the products are used, supporting Objective 2.

Data Provision

Releasing reliable, high quality information will help customers better understand their travel. To do this:

- Develop an updated Open Data Policy with a plan to prioritising new or optimising existing datasets available to customers, supporting Objectives 2 and 3.
- Continue to work with TfN to develop the IST work stream so that so that the Open Data released to will raise customers awareness of the range of ticket options and

prices before travelling so they can choose the best value ticket, supporting Objective 2 and 3.

There are several actions outlined within the Strategy that will help contribute to the achievement of the overall Strategy objectives. These actions will be aligned with the updated Open Data Policy and TfN’s IST work stream.

6. What have we achieved over the last five years?

A number of projects have been delivered as part of the previous Retail Strategy (2014-19) that have considerably improved the ease of ticket purchase and assisted in the move towards digital payment (particularly the use of smartcards and apps). Table 4 summarises these developments.

Table 4 – Retail Strategy projects delivered 2014-18

Project/improvement	Details
<p>The Smart Transactions Project</p> <ul style="list-style-type: none"> - All multi modal MCard ticket products are now on smartcard technology - Customers can buy or renew MCards online and at a wide range of retail outlets. 	<p>Delivery of smart ticketing network, including;</p> <ul style="list-style-type: none"> -A new retail network (700 Payzone shops, bus and rail station ticket machines, job centre plus terminals and the Android sales app -New products (for example, Daysaver, Park and ride tickets) - A back office capable of processing the smart taps at rail gates and on bus to help provide the data to reimburse the operators for MCard and the ENCTS (English National Concessionary Scheme)
<p>The CHASE card management system</p> <ul style="list-style-type: none"> - Customers can order smartcards and eligibility passes online 	<p>Delivery of a new online card management system, including;</p> <ul style="list-style-type: none"> -Under 16, 18-18 and 19- 25 card applications -Seniors and Blind & disabled card applications -The transferable pink card -Annual cards including corporate cards -Marketing
<p>Traveller Information</p> <ul style="list-style-type: none"> - Real time information is available on mobile devices and every bus stop in West Yorkshire - Electronic information services at bus stations 	<p>Delivery of enhanced customer information, including;</p> <ul style="list-style-type: none"> -QR and nfc tags at all 14,500 bus stops -Infopoints in bus stations -Multi-stop displays which show groups of bus stops -Open data including links with the Open Data Institute
<p>Web Project</p> <ul style="list-style-type: none"> - The wymetro.com website is the “go to” source of live travel information and has the capacity to deliver in times of high demand such as snow days. 	<p>Enhanced websites and hosting arrangements, including;</p> <ul style="list-style-type: none"> -A mobile/ tablet friendly website -New “cloud” hosting -More robust at scalable in periods of increased demand

The above projects have been matched with investment in technology systems by bus operators most of whom can now accept contactless EMV payment.

7. How have we performed alongside Key Performance Indicators (KPIs) set in the previous strategy?

The Retail Strategy set out the a number of KPI's including the base year position in 2013/14 and target year of 2018/19. Table 5 summarises progress towards these targets. The Combined Authority has set a position where all multi modal ticket products need to be cost neutral – this is reflected in the KPIs reported in Table 5.

Table 5 - Retail Strategy targets and actual performance

Targets/ KPI's	2013/14 position	2018/19 target	2018 actual⁷
Number of product transactions (bus)	1,433,800	1,901,500 (+30%)	1,379,235
% of face to face compared with self-serve transactions	0% self-serve	28% self-serve (+28%)	38% self-serve (exceeded target)
Number of pass applications	149,000	152,000 (+ 2%)	90,520
On bus versus off bus transactions	38% on bus, 62% off bus	12% on bus (- 32 %), 88% off bus (+ 42 %)	92% (exceeded target)
Number of users	0.582m	+3%	0.616m

The developments have therefore been successful in meeting and exceeding the Targets and KPI's as set out in the original Retail Strategy.

The projects have been successful in enabling;

- A transition from paper based Metrocards to smart MCards;
- Transition to a new card application and retail network which has enabled a shift by customers to self-serve;
- A well-used system which has issued 700,000 MCards with 200,000 different customers making 1.3 million weekly smart transactions;
- Capturing smart data from customer taps has enabled improved datasets and intelligence for planning and reimbursement of the MCard revenues to operators; and
- Better information for route planning (pre journey) and real time journey information (at stop and in trip).

8. Where do we want to be?

In order to deliver the objectives of this strategy, table 6 identifies a number of actions that will be required over the next three years. These actions are reflected in the delivery plan that sits alongside this strategy (see Section 9). The actions may incur additional resource

⁷ April to November 2018

costs (in staff time and financial costs) that would need to be budgeted for example from any future project costs.

Table 6 – Strategy objectives and gap analysis

Objective	Gap analysis	Actions to address	Who does what
Purchase – making it easier to buy travel	Face to face- extensive Self-serve- sales app android only and requires customer to already have a smartcard.	Develop other web based sales to cater for Apple customers and customers without smartcards	WYTCL / operators agree approach, CA/ operators deliver
Products – ensuring that the product range is available to meet customer needs and lifestyles	Extensive range of products available for regular travellers but less so for occasional/ part time, Young People, and groups/ families. Barcode app – no multi operator offer (MCard)	Continued use of intelligence from primary research including TRACKER survey ⁸ ; Develop smart tickets for: <ul style="list-style-type: none"> • Part time travellers • Families/ groups • Young people 	WYTCL / operators agree approach, CA/ operators deliver
Journey – enabling seamless pre purchase of travel	Trav.ly, a first generation MaaS app launched in Summer 2018 offering journey planning, bus real time, car club locations and purchase of Daysaver and Park and Ride mobile phone flash pass tickets	Upgrade flash pass tickets to QR/ ticket machine readable formats, and develop a second generation MaaS app with enhanced functionality.	WYTCL / operators agree approach, Combined Authority to develop potentially with commercial partner
Data and analysis – better understanding how customers are travelling and where to focus future product developments	Make use of greater potential for analysis of data associated with existing products.	The continued use of intelligence from primary research e.g. TRACKER to better understand customer’s perceptions, demands and therefore gaps in the services that are offered. We should also reference that there is greater potential for analysis of the data associated with the products. This can include card registrations	WYCA to provide analysis, Operators to provide data as required.

⁸ Also includes data from card registrations (demographics) and card use (tap-on transactions). The combination of these will help us to provide a more complete picture of product uptake/use and help us to better meet customer demand.

Objective	Gap analysis	Actions to address	Who does what
		(demographics) with card use (tap-on transactions). A combination of these will help us provide a more complete picture of product uptake/use and help us better meet customer demand.	

Table 7 details the KPI's that have been measured for several years now, updated with new targets for the next three years, the duration of the new Digital Payment Strategy.

Table 7: New Digital Payment Strategy targets 2018-21

Targets/ KPI's	Baseline (2018)	2021 target	Why measure?
Number of product transactions (bus sales)	1,379,235	↑	To help track usage of the systems and changes in ticket purchase (e.g. switching from a weekly to daily's or vice-versa). Using product/transaction data to generate intelligence to better understand customer behaviour to enable a better understanding of gaps.
% of face to face v self-serve transactions at Metro outlets	38% self-serve	↑	To help show the shift to self-serve
Percentage of card applications completed online	Data being obtained	↑	To help track usage of the systems and potential usage- a key aim of the Transport Plan
Percentage of off bus transactions	Data being obtained from Operators	↑	To help demonstrate the potential to speed up journey times and reliability
Proportion of cashless transactions	Data being obtained from Operators	↑	To help demonstrate the potential to speed up journey times and reliability
Reduce proportion of pink MCards in active use	Data being obtained	↓	Move towards digital payment and use of apps to replace pink MCards
Number of MCard journeys (rail and bus)	17,748,988	25% increase	To help contribute to the 25% increase in bus patronage target as set in the West Yorkshire Transport Strategy by 2040
Increase the number of bus journeys made by under 19s	3,911,368	5% increase by 2019/20	To help contribute to the 25% increase in bus patronage target as set in the West

Targets/ KPI's	Baseline (2018)	2021 target	Why measure?
			Yorkshire Transport Strategy by 2040
Increase MCard bus sales – focus on 19 - 25 products (by volume and value)	38,616 / £1,187,650	5% increase by 2019/20	To help contribute to the 25% increase in bus patronage target as set in the West Yorkshire Transport Strategy by 2040

9. How will we get there? Identification of potential projects

There are several future projects that have been identified as a result of workshops held with internal and external stakeholders (including West Yorkshire Ticketing Company and transport operators). Projects such as these will be developed, and submitted through the CA's Assurance Process and delivered to help us get to where we want to be. Previously the smartcard system required relatively large capital investments as the solution was infrastructure heavy, with back offices and a retail estate including ticket vending machines. That investment is now made and the required future development can utilise existing kit whilst future developments are for example smartphone based which is relatively cheap to develop. Additionally, there are a number of different options for paying for the development and on-going running costs of the new initiatives. It might be for the Combined Authority to pay for and undertake the development work, then to seek MCard/ WYTCL to pay for the ongoing costs. Or MCard/ the WYTCL could pay for and/ or develop these projects, along with paying for the ongoing costs. Or for the Combined Authority to work in partnership with the commercial sector, for example for the development of MaaS apps.

The below potential projects have been guided by the objectives of this strategy. Table 8 outlines the types of projects identified and the timescales over which these could be delivered. Note these are examples of types of projects that will be investigated and could be submitted via the Assurance process to deliver the objectives set out in the document. Further details of these potential projects will be included in the final version of this Strategy.

The following table includes example potential projects that could be developed to deliver this Strategy.

Table 8 – Draft Delivery Plan for Digital Payment Projects

Objective	Example potential projects	Facilitated by	Delivered by
<i>Purchase</i>	MaaS App	Combined Authority	Combined Authority/ third party supplier
	Direct Debit option	Combined Authority	Combined Authority/
	Review a possible expanded reach of the Travel Plan Network including offering discounted travel and pre-purchase of products. Including reviewing role of CA as an independent broker of all tickets. Review corporate offer to pass on savings to employees. Review tax implications of pre-paid accounts	Combined Authority	Combined Authority
	Smartphone App/ web sales and QR tickets	WYTCL/Combined Authority /operators develop	Combined Authority
	Gift tickets so can buy and pass on	WYTCL/Combined Authority /operators develop	Combined Authority/ supplier
	Develop purchase options for people without bank accounts	Yorcard/ Transport for the North	Yorcard/ supplier
	Enable action listing so that iphone users can pick up their products on bus	WYTCL/Combined Authority	WYTCL/Combined Authority
	Travel centre refurbishment	Combined Authority	Combined Authority/ supplier
	Review eligibility rules and amend systems/ processes as required. Simplify and add application process into an App	WYTCL/ Combined Authority /operators develop	Combined Authority/operators/ supplier
<i>Products</i>	Improved awareness or, move group travel tickets to smart	WYTCL/operators develop	Combined Authority /operators/ supplier
	Improved awareness of, and develop where relevant, tickets for part time workers	WYTCL/operators develop	Combined Authority /operators/ supplier
	Improved customer awareness of, and make the full range of young person's/ apprentice tickets available on smart.	WYTCL/Combined Authority /operators develop	Combined Authority /operators/ supplier
	All tickets on all platforms (for example MCard products on operator retail platforms such as Apps, all MCard products at each bus station ticket machine)	WYTCL/operators develop	Combined Authority /operators/ supplier
	Expand "hotlisting" functionality, to block lost/ stolen/ damaged cards, to include more products/ cards	WYTCL/ Combined Authority /operators develop	Combined Authority /operators/supplier

West Yorkshire Combined Authority

Objective	Example potential projects	Facilitated by	Delivered by
	Review gaps in ticket ranges such as a bus and rail Daysaver	WYTCL/operators develop	Combined Authority /operators/supplier
<i>Journey</i>	Pre-purchase methods. Review adding MCard products on operator apps and operator products on the MCard app.	WYTCL/operators develop	Combined Authority /operators/supplier
	Transport for the North rail season tickets available as smart, single bus fares data & disruption data and contactless debit/ credit card fair price promise payment system	Transport for the North	Transport for the North/ supplier

The draft projects will be subject to consultation and further development, before being submitted via the CA Assurance Framework where value for money of the schemes will be assessed. These schemes are therefore detailed for example purposes of the types of measures that can be developed. The actions/ projects may incur additional resource costs (in staff time and financial costs) that would need to be budgeted for example from any future project costs.

10. Next steps

The Strategy proposes a list of projects to be delivered in the coming 3-5 years. Requests for capital funding for such projects would be submitted in a separate capital request report. The immediate next steps to be delivered in 2019/20 are as follows:

- Complete online pass/smartcard offer (CHASE);
- Expand range of ticketing products for under 25s;
- Expand sales of MCards onto mobile apps;
- Recording of QR code taps in back office;
- Develop tools to derive better intelligence from data; and
- Transformation project at Travel Centres.

The above will be incorporated into the funding and work programme of the Combined Authority, transport operators and TfN.

Appendix A - Trends that are influencing public transport usage

There are several trends which are influencing the way in which we travel and will continue to do so over the coming five years.

Mobile phone ownership continues to grow together with usage of phones for accessing internet content and apps

In West Yorkshire, all respondents to the Tracker Survey aged 16-44 owned a mobile phone and 95% had access to the internet via their phone. A smaller proportion of people own mobile phones in the over 75 age category (70%) and only 20% have access to the internet via their mobile phone in this age category⁹. However the ownership and internet access is increasing and forecast to increase over time.

There has been a shift away from payment by cash on buses

In West Yorkshire there has been a 20% increase in off bus ticket sales over the year 2016-17¹⁰. All of the major bus operators in West Yorkshire will be able to accept contactless payments by mid-2019 and First have reported that take up of contactless payments has reached 24% in West Yorkshire¹¹. Half of all park and ride users in Leeds use cashless payment methods (either the MCard smartcard or Trav.ly bar code tickets).

Whilst contactless usage continues to increase¹², there is still a significant proportion of the population (particularly amongst younger and older people) who do not have a contactless bank card or who do have one but do not use it¹³.

Use of MCard tickets continues to increase - £32m of MCard tickets sold per annum (these are smart, off bus/ pre-purchased tickets). Over 700,000 MCards have been issued and there are 1.3m uses of the smartcard per week by over 200,000 different customers per week.

Move to self-serve: More tickets purchased through kiosks in place of travel centres

Overall there has been a shift from face to face ticket purchase (83% in June 16 reducing to 62% in June 18) to self-serve channels (up from 17% in June 16 to 39% in June 18). Over the period April 2014 – June 2018 Payzone outlets have taken over the volume of sales from Post Offices and there has also been a transfer of £1m sales from travel centres to kiosks¹⁴ (see Figure A1).

The volumes of overall sales has risen, though not across all products/ customer groups. The main product showing an increase in sales is the recently introduced 19-25 product and Young Person's tickets, including those sold on bus. This increase in sales could be due to the phasing out of paper tickets (not included in these figures), introduction of day saver tickets and possibly customers switching to lower value products. This could be due

⁹ Data from West Yorkshire Ticketing Company Ltd (WYTCL)

¹⁰ Data from West Yorkshire Ticketing Company Ltd (WYTCL)

¹¹ Data as of September 2018

¹² WY Tracker survey – increase in contactless bank card ownership from 64% in 2016 to 77% in 2017.

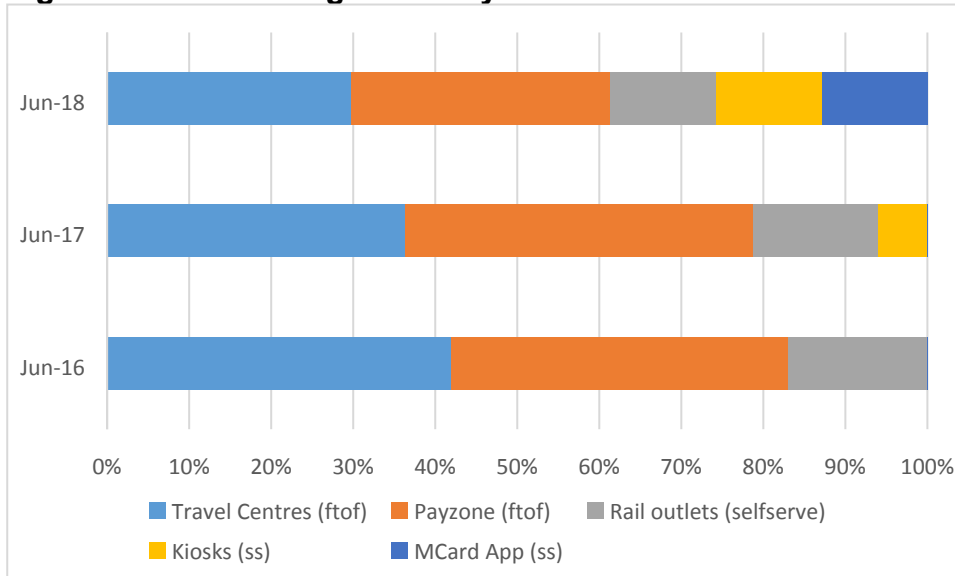
¹³ Less than 50% of over 65 year olds own and use a contactless bank card – WY Tracker survey 2017

¹⁴ TVM and retail network supplier data

to the trends identified above such as a shift to shorter working weeks/ part time working from a traditional 5 day week to 3/4 days per week altering ticket purchase.

By volume, the same number of people now purchase tickets through the MCard app and kiosks as at ticket vending machines (TVMs) (see Figure A1).

Figure A1 – Percentage sales by outlet – 2016-2018



People are travelling less for some journey purposes

There is growing evidence that we are travelling less now than we did twenty years ago¹⁵. This reduction has particularly occurred in leisure travel and can be partly attributed to a rise in leisure options such as ordering in food (rather than visiting a restaurant), getting a movie on demand (rather than visiting the cinema) or internet shopping. Over the same period rail trips and distance travelled by rail has continued to grow.

Whilst there has been an overall decline in bus journeys, there has also been a growth in the volumes of young people travelling by bus. Sales of bus ticket products to the under 19 and under 26 age groups continue to grow¹⁶.

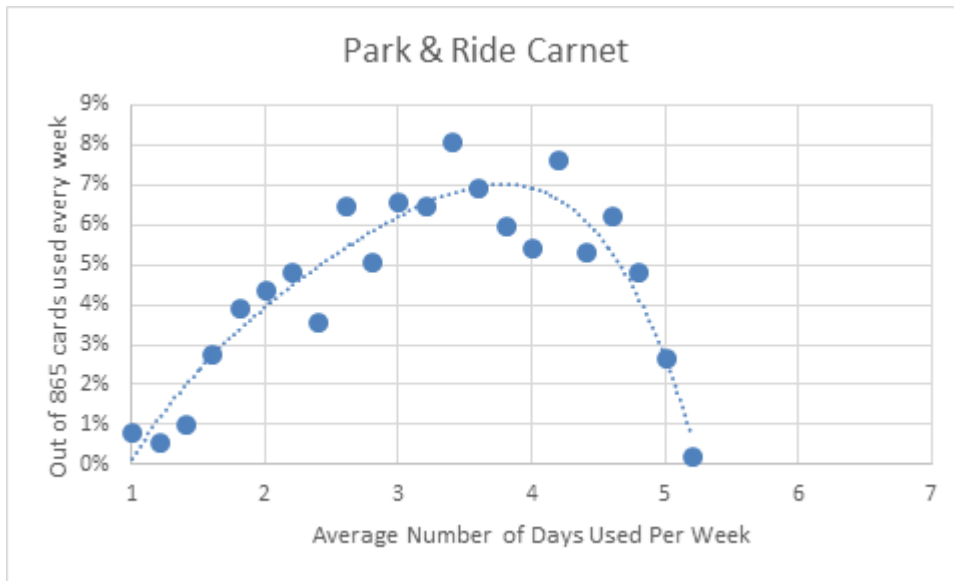
Working patterns have changed

More people are working flexibly or part time and people often work from home one or more day a week so are no longer travelling into work every day. Data from West Yorkshire park and ride sites (Figure A2) illustrate the average number of days that a weekly carnet ticket is used. The trend is showing that most Daysaver users use the tickets 3-4 days per week, which would seem sensible as a weekly ticket is more relevant when travelling 5 or more days per week.

¹⁵ All Change – the First Report of the Commission on Travel Demand pg 16 (2018)

¹⁶ Under 19 and under 26 weekly bus ticket sales data 2016/17 and 2017/18 from WYTCL

Figure A2 – Park and Ride Carnet usage 2018



Appendix B – Transport for the North

Transport for the North is the organisation that is responsible for developing the strategy, direction and delivery of transformed transport systems throughout the North of England.

The TfN programme is seeking to follow London's lead in developing Pay As You Go best fare contactless ticketing, however fares are more complex in the deregulated bus environment in the rest of England including here in West Yorkshire. In London flat fares operate regardless of journey length enabling a single tap of a card on the bus with no driver interaction on the destination required. This also enables the setting of maximum cost for the customer per day. Outside London, fares differ between operators and generally relate to the distance travelled. The TfN system will initially charge customers on single, return or day by day basis extending to weekly when fully established. Demand will remain for pre purchased monthly and annual season ticket products including those offered by MCard. Using a contactless bank card as a means of paying for travel is not available to those without bank accounts, and also not liked by all. Without a solution to this, a move to only contactless payment would not support the Combined Authority's Inclusive Growth ambitions. TfN is seeking to develop a card based solution for those without bank accounts and the day and week MCard tickets will remain available on the MCard smartcard. The Combined Authority is also looking to develop other ticketing systems such as mobile phone based bar code style tickets

Under 18s are a key group of bus users who will not have a contactless bank card. At present young people's products represents the highest volume of sales and growth in MCard products and it will be crucial to continue to offer ticketing systems such as the MCard smartcard to these customers.

Impact of TfN for West Yorkshire

Whilst Transport for the North's Integrated and Smart Ticketing programme will offer additional ways to pay to some groups, as detailed above, there are other parts of the ticketing jigsaw that the CA need to have in place to ensure that the ticketing system remains available to all customers. It is the role of the CA to ensure TFNs plans align with local delivery across its three Tranche roll out;

- TfN Tranche 1: The main deliverable in Tranche 1 is to add rail season tickets to a smartcard. There are no major impacts or changes for MCard although a small number of customers may migrate from the MCard. Customers who do add rail season tickets to a smartcard will benefit from a more robust ticket (as it replaces the paper "magstripe" ticket) and quicker passage through gate lines.
- TfN Tranche 2: the main deliverables are to provide a portal which will enable the CA and other Transport Authorities to integrate with bus single fares data and disruption information into their existing travel information services. There would be project work required to interface our systems with the new system to gain benefit from the additional data
- TfN Tranche 3: creates account based ticketing from 2019 onwards with contactless debit and credit cards (starting with simpler day tickets progressing to offer weekly and multi-operator products). This could expand the market for people using smart tickets to include infrequent travellers as there is no need to have a smartcard in advance, just a contactless bank card. It could migrate some existing day and week MCard customers, however there is the need for

smartcards to remain (unless a new technological solution is developed) to service both monthly and annual MCard customers (TfN will stop at a week cap) and entitlement cards (for example for Young People and Seniors as they may not have contactless debit/ credit cards and to fulfil the Government requirements to run a smartcard system for seniors). Furthermore, day and week MCard products would remain in their MCard smart versions as evidence shows that some customers simply prefer to keep their transport on a separate card despite having access to contactless bankcards.

1. TfN related next steps for West Yorkshire

2. Transport for the North's programme will enable customers to pay at the end of the day for bus travel which may, in time, link to rail. The back office and commercials etc. will be set up by TfN. The ongoing operation will be provided by a "special purpose company" which is owned and operated commercially by, for example, operators. Services built around car share/ hire, taxis/ private hire, demand responsive bus services and bike share, known as MaaS will develop and mature independently from the TfN solution unless the respective markets seek to integrate.
3. In the early stages of the delivery of earlier ticketing strategies, the CA was providing the capability which enabled the roll out of smartcard technology. Smartcards will continue to have a role for several years to come especially for long term season tickets and young people's travel products. TfN will be developing the contactless back office ticketing offer, however the CA will need to develop app based ticketing solutions such as bar code tickets and coordinate MaaS solutions.

Expanding the MCard app into providing journey planning and mobile ticketing would be a logical next stage in the development of a MaaS platform. This would require a development of an app.

Find out more

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