

WEST OF ENGLAND JOINT COMMITTEE

19 JULY 2019

REPORT SUMMARY SHEET

INTEGRATED TICKETING – FUTURE WORK

Purpose

The report updates members on the proposed next stages of the Integrated Ticketing project.

Summary

This report includes the following key information:

- * Background on the West of England vision for Smart and Integrated Ticketing /Payments, developed in 2016, and included in the report as an appendix.
- * The current aims of the integrated ticketing project and the positive steps taken so far relating to cashless payments through Travelwest travelcard, Firstbus M ticket app and on-bus card readers.
- * Steps being taken nationally to develop an integrated ticketing offer across modes.
- * The delivery approach.
- * Details of the current phase 1 requirements and timescales.

Recommendation

Members of the Joint Committee are asked to endorse the proposed next stages of the Integrated Ticketing project.

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REPORT TO: WECA COMMITTEE & WEST OF ENGLAND JOINT COMMITTEE

DATE: 19 July 2019

REPORT TITLE: INTEGRATED TICKETING – FUTURE WORK

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Purpose of Report

WECA Committee

- 1.1 To update WECA members on the proposed next stages of the Integrated Ticketing project.
- 1.2 To ask the Committee to note the proposed initial drawdown of £300k to progress with the phase 1 officer support / potential external consultancy support, and delegate approval of the detail of the award through a Feasibility and Development Funding Application to the WECA Chief Executive in consultation with the West of England Chief Executives.
- 1.3 To seek agreement for the WECA S73 officer to lease equipment to small bus operators at less than market rate as set out in the contactless upgrade Full Business Case and subject to state aid regulation compliance.

Joint Committee

- 1.4 To ask the Joint Committee to endorse the proposed next stages of the Integrated Ticketing project.

2. Background

2.1 The bus is a significant public transport mode in the West of England. The West of England partner authorities have held longstanding aspirations to develop smarter payments and integrated ticketing in the area as part of increasing the attractiveness, and removing barriers to, public transport and supporting the wider goals to grow the market; increase patronage; and reduce congestion.

2.2 The West of England vision for Smart and Integrated Ticketing/Payments, developed in 2016, set out:

- A unified smart payment and ticketing platform across all modes of public transport in the West of England area in order to provide a simple and consistent experience for all public transport users.
- A customer focussed system under a single brand with best value fare and pay as you go (PAYG) travel using the latest contactless and mobile technologies.

The West of England smart ticketing 2016 vision document is attached at Appendix 1.

2.3 The vision for a single smart ticketing solution across the region has been referenced in West of England Combined Authority (WECA) devolution agreement.

2.4 Positive initial work has already been undertaken with the introduction and growing usage of the Travelwest Travel card and the introduction of Firstbus M Ticket App and the commitment to smart / integrated ticketing has been re-iterated throughout the Draft Joint Local Transport Plan 4 (JLTP4). In addition, there is currently the ability to make cashless payments on First buses with the driver discussing with the passenger regarding the required fare. Smart ticketing is identified as a specific outcome necessary to successfully deliver the plan; increasing public transport mode share and supporting the wider goals to grow the market; increase patronage; and reduce congestion.

2.5 The increased maturity of the mobile and contactless payment industries, as well as the new powers available to local authorities through the Bus Services Act 2017 and to WECA as a result of devolution, have created the opportunity to develop customer focused ticketing and payment solutions similar to those available in London.

2.6 In addition to new powers – further opportunities to deliver the vision are available as a result of:

- The technology to deliver common payment and smart/mobile ticket reading functionality, whilst expensive, is now well established
- Transport for the North (TfN), Transport for the West Midlands, and the Welsh Government are working to specify and develop a contactless bank best fare and account based system (effectively a tap in, tap out payment by credit card across multiple modes) which could offer opportunities for partnership working
- First (and the other big 5 bus operators nationally) see 'best value' systems as the future (trials of operator specific solutions are expected in 2019)
- The DfT have recently consulted on the potential to expand rail Pay as You Go nationally in 2020. They are currently analysing the feedback.

2.7 In order to deliver the smart / integrated ticketing vision it was identified that the core building blocks of standardised technology (on bus ticket machines/readers) and a centralised/unified purchasing offer (effectively a common ticket, retail website and mobile app) are required across the area. Projects to establish a common base for contactless payments on bus and develop longer term delivery plans are able to be progressed immediately - and are vital stepping stones in delivering the vision.

Alignment with other work

2.8 The smart / integrated ticketing project is one of three interlinked projects which underpin the regions approach to improving bus services;

- Bus Strategy;
- Bus Infrastructure improvements; and
- Smart / Integrated ticketing

2.9 The bus infrastructure report on this agenda provides further detail of the planned approach to establishing a bus programme aligned with regional priority and outcomes identified in the draft JLTP.

3. Delivery Approach

3.1 The large growth in the availability of smart phones and development of contactless payments have transformed the wider retail sector and are driving changes in fare payments. This has already begun to move the sector away from on bus cash payments.

3.2 This change is happening at pace. For example:

- The UK's major bus operators have committed to enabling contactless payments on all buses by 2022 but there remain questions about the payment models and technology that this would involve.
- Transport for the North (TfN), supported by the DfT are positioned in a lead role to deliver a fully integrated bus, light and heavy rail ticketing system across their region, but the scale of the projects is considerable creating a range of implementation challenges.
- Other bodies such as the Welsh Government and Midlands Connect are also aiming to create integrated ticketing systems which could offer 'lighter' alternatives to the TfN approach.
- Transport for West Midlands (TfWM) have also developed a programme looking to introduce integrated ticketing in time for the 2022 Commonwealth Games.
- Mobile ticketing is normally restricted to one operator and few advances have been made in integrating different operators.
- Attempts to define common standards for data, protocols and hardware in addition to ITSO (integrated transport smartcard organisation- the non-profit membership organisation of smart ticketing) are still at a very early stage.

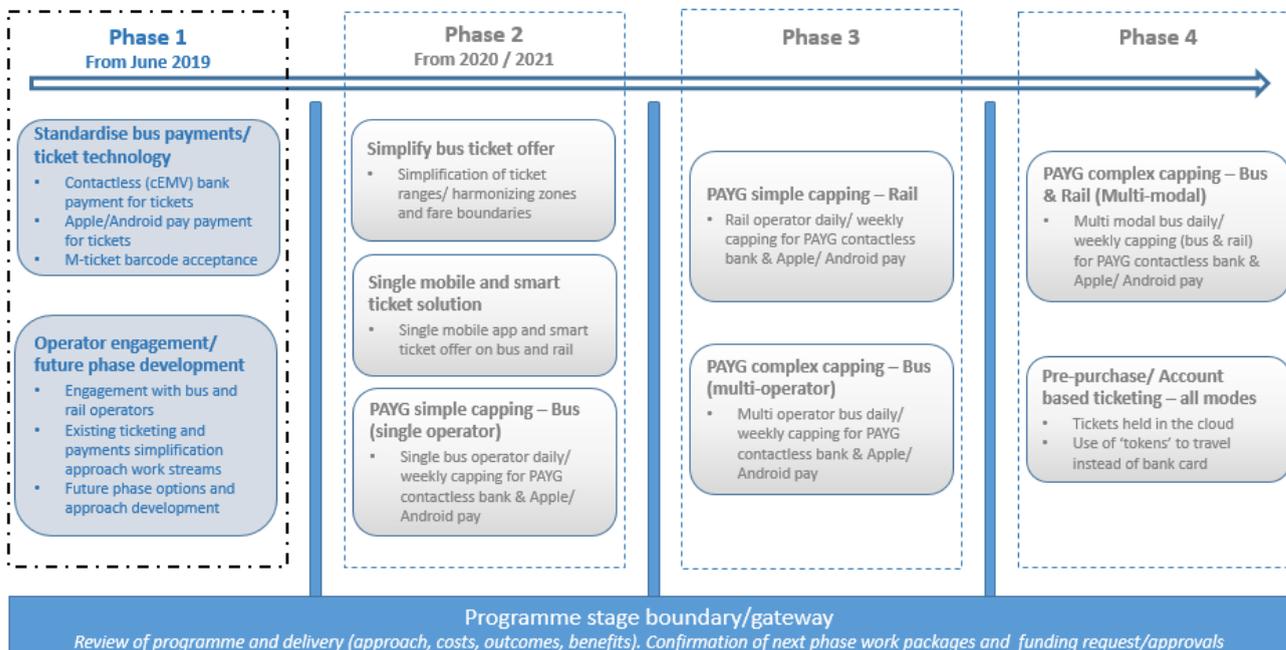
3.3 An agile approach to delivery in the West of England is therefore proposed. The completion of each project and phase will need to be incremental and iterative to allow an opportunity to develop, review and refine projects based on changes in technology and learning from elsewhere.

Project Governance and High-level programme

3.4 WECA will lead the project with a Smarter Payments and Integrated Ticketing Board established to oversee programme and individual project delivery. This will include North Somerset and will rely on significant engagement with operators.

3.5 The below high-level programme plan outlines the likely phases of delivery.

Smarter payments and ticketing roadmap



Note: timings for phase 3 and 4 are dependent upon agreements that would need to be reached with bus and rail operators and are therefore harder to predict. These are also likely to be informed by progress of other ticketing systems nationally (such as TFN and TfWM). Phases 3 and 4 are likely to form a longer-term project of 2-5yrs beyond phase 2.

3.6 The phases of the programme are structured in such a way to enable establishment and development of the most appropriate solutions based on the most suitable and up to date technology – as well as enabling the West of England to benefit from the outcomes of the DfT funded ticketing smart ticketing projects led by Transport for the North and Transport for the West Midlands

3.7 Phase 1 delivery:

Phase 1 projects have been identified that can be progressed with the aim of:

- A. Supporting smaller bus operators to be able to replace ageing equipment and introduce contactless bank card payment technology through upgrading on bus ticket machines.

This would provide a standard technology for bus payments and ticketing in order to support the current payment and barcode ticketing (100% of bus operators in the area being able to accept standardised contactless bank payments and barcode tickets).

Without support to assist in upgrading bus ticketing equipment, the majority of bus operators will continue to use existing equipment. Whilst this equipment meets basic standards, it does not deliver a smart / integrated ticketing solution across the region, limiting the ability of achieving the draft JLTP4 outcomes.

A Full Business case for the equipment replacement project has been developed and is reported elsewhere on the WECA committee agenda (item 15).

- B. Continue engagement with all stakeholders (bus/ rail/ ferry/ public sector) to define and develop the future payments and ticketing offer and the approach to deliver this (to enable deliverable projects to be defined and developed for the subsequent phases). Engagement of specialist consultancy advice as necessary to support the development of technical elements as proposals are developed.

3.8 North Somerset Council are actively involved in phase 1 of the project and are providing £40k to support the purchase and implementation of ticket machines for smaller operators, operating within the North Somerset Council area. This contribution is alongside the £418k contribution from WECA for smaller operators within the WECA area. In addition, the long-term proposal is to deliver an integrated ticketing offer which is scalable across modes, operators and areas and as such North Somerset Council will be involved in project discussions to ensure that a consistent and scalable approach for the West of England region is considered from the outset.

Timescales and resources

3.8 The below draft schedule details the key activities and timeline for delivering the proposed Phase 1 projects:

PHASE 1		2019/20				2020/21			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Standardise on bus payments/ticket technology								
1.1	Develop agreements (lease/hire and framework call off)								
1.2	Ticket machines orders placed (as agreements signed)								
1.3	Ticket machines install (including setup and migration support)								
1.4	Go live testing and support								
1.5	All participating operators live (cEMV and barcode capability)								
1.6	Project Closure								
2	Operator engagement/ future phase development								
2.1	Bus operator engagement								
2.1.1	Operator discussions (ticket and PAYG technology)								
2.1.2	Operator discussions (harmonise/simplify ticket range)								
2.1.3	Technical options and delivery pathway development								
2.1.4	Report on outcome of discussions and technical/delivery options								
2.2	Rail operator engagement								
2.2.1	Operator discussions								
2.2.2	GWR rail franchise award								
2.2.3	Technical options and integration into national PAYG plans								
2.2.4	Report on outcome of discussions and technical/delivery options								
3	Phase 1 boundary/ gateway review								
3.1	Carry out stage boundary/gateway and next phase review								
3.2	Sign off to proceed with next phase identified projects								

3.9 The West of England smart / integrated ticketing project was historically led by South Gloucestershire Council on behalf of the Region. As part of the transition to WECA, the relevant officers will be seconded into WECA and continue to support the project.

3.10 Given the nature and scope of the technology requirements for the project, it is anticipated that the project needs to procure support from consultants to provide recommendations on technology options to progress the project and anticipated project costs.

4. Consultation

4.1 The ongoing development of the project will require considerable stakeholder engagement over the anticipated term of the project, with consideration given to the membership of a working group to ensure that on-bus technology is acceptable to operators.

5. Other Options Considered

5.1 Smart / integrated ticketing within the region is a central pillar to the identified strategic approach within the draft JLTP. A do-nothing approach would leave a significant portion of the JLTP requirements underdeveloped and unable to be progressed.

5.2 In addition, the approach underpins transport mitigations in support of the Joint Spatial Plan, providing reassurance to stakeholders as part of the Joint Spatial Plan Examination in Public, that projects are being taken towards longer-term delivery.

6. Risk Management/Assessment

6.1 Risks exist in relation to a do-nothing approach and the effect this will have on restricting development and growth as well as the impact that the lack of forward planning could have on the confidence around the delivery of both the Joint Local Transport Plan and Joint

Spatial Plan. A risk log for Phase 1 is included within the Full Business Case.

- 6.2 Risks exist in relation to understanding how a solution developed for different markets in TfN or TfWM could be applied in the West of England.

7. Public Sector Equality Duties

- 7.1 The public sector equality duty created under the Equality Act 2010 means that public authorities must have due regard to the need to:
- Eliminate unlawful discrimination, harassment and victimization and other conduct prohibited by the Act.
 - Advance equality of opportunity between people who share a protected characteristic and those who do not.
 - Foster good relations between people who share a protected characteristic and those who do not.
- 7.2 The Act explains that having due regard for advancing equality involves:
- Removing or minimizing disadvantages suffered by people due to their protected characteristics.
 - Taking steps to meet the needs of people from protected groups where these are different from the needs of other people.
 - Encouraging people from protected groups to participate in public life or in other activities where their participation is disproportionately low.
- 7.3 The general equality duty therefore requires organisations to consider how they could positively contribute to the advancement of equality and good relations. It requires equality considerations to be reflected in the design of policies and the delivery of services, including policies, and for these issues to be kept under review.
- 7.4 An Equality Impact Assessment and a Health Impact Assessment has been undertaken as part of Environment Report for the new JLTP4.

8. Finance Implications, including economic impact assessment where appropriate

- 8.1 The prioritisation report on this agenda (item 15) provides provisional funding allocations for identified projects. The smart / integrated ticketing project has been included with a funding allocation of £0.75m.
- 8.2 A Full Business Case has been created for the Phase 1 element to support bus operators in standardising payment / ticket technology seeking £418k from the Investment Fund. This is reported as part of the prioritisation report on the WECA committee agenda.
- 8.3 An initial sum of £300k is requested to fund:
- Officer support to establish operator engagement,
 - Officer support to develop the future phases,
 - Officer support to manage the initial phase of the project; and
 - Engage specialist consultant support if necessary.

This will be drawn down through the completion and approval of a Feasibility and Development Funding Application.

- 8.4 As part of the project it is proposed to offer the use of WECA purchased ticket machines to smaller operators in order to increase the provision of cashless payments across all of the bus fleet operating in the West of England. Typically, smaller operators and those contracted to provide supported bus services have been unable to justify the upfront purchase of this equipment and are unable to lease the equipment at full market value. It is therefore proposed to offer lease

arrangements to these operators at less than market value in order to secure the take up of this equipment, subject to state aid compliance. The proposed details are contained within the Ticket machine purchase business case and have been reviewed by WECA finance officers.

Advice given by: Malcom Coe, Director of Finance

9. Legal Implications

9.1 There are no legal implications identified resulting from the proposed progression of the wider Integrated Ticketing project.

9.2 As identified in recommendation 1.3, equipment purchased as part of the project, is proposed to equip smaller bus operators with ticket reader machines. These will be installed by, leased and maintained by smaller operators for a period of 5 years at which point the asset will be returned to WECA. The precise arrangement for the lease agreement will need to be drawn up by officers in consultation with Legal and leases would then be entered into by the S73 Officer on behalf of WECA. Any arrangement will be state aid compliant

Advice given by: Shahzia Daya, Director of Legal

10. Land/Property Implications

None arising from this report. Land/property implications arising from the overall project or individual elements / schemes will be managed through their respective design processes.

11. Human Resources Implications

11.1 Initially it is anticipated that a senior project manager would be appointed to lead the projects. This will require a level of seniority and mix of skills consistent with the complexity of the project. The current lead officer for the project will be seconded into WECA for the duration of the project. This will be funded from the £300k that is being requested in this report.

11.2 Further project support will be required over Phase 1 however this will be developed as part of the tender award process over the term of the project as resourcing needs become clearer.

Advice given by: Alex Holly, Head of HR

12. WECA COMMITTEE RECOMMENDATIONS:

12.1 The Committee is asked to endorse the outline programme and approve the formation of a programme/projects board.

12.2 The Committee is asked to note the proposed initial draw down of £300k to progress with the phase 1 officer support / potential external consultancy support and delegate approval of the detail of the award through a Feasibility and Development Funding Application to the WECA Chief Executive in consultation with the West of England Chief Executives

12.3 The committee is asked to give authority for the WECA S73 officer to lease equipment to small bus operators at less than market rate as set out in the contactless upgrade Full Business Case subject to state aid regulation compliance

JOINT COMMITTEE RECOMMENDATION:

12.4 The Joint Committee is asked to endorse the proposed next stages of the Integrated Ticketing project.

Appendices

Appendix 1 West of England 2016 Smart and integrated ticketing vision, powers, and delivery pathway report

Background papers:

West of England draft Joint Local Transport Plan 4, WECA committee 18th January 2019

West of England Combined Authority Contact:

Any person seeking background information relating to this item should seek the assistance of the contact officer for the meeting who is Ian Hird / Tim Milgate on 0117 332 1486; or by writing to West of England Combined Authority, 3 Rivergate, Temple Way, Bristol BS1 6ER; email: democratic.services@westofengland-ca.gov.uk

Smartcard Programme Board 8th July 2016

Smart and integrated ticketing vision, powers, and delivery pathway report

Executive summary

Initial workshop activities have enabled the development of both a draft high level vision for smart and integrated ticketing as well as a pathway to delivery - utilising powers and funding available through the Bus Services Bill and the potential devolution deal.

The delivery pathway is based on a three stage approach:

- Phase 1 Quick wins** (deliverable with current systems but require operator commitment)
- Phase 2 Simplify existing ticketing** (negotiated with operators using the 'stick' of new powers)
- Phase 3 Enhanced ticketing/technology refresh** (use of new powers; governance; and systems to delivery 'Oyster' style ticketing)

It is recommended that the Board:

- 1. Reviews and comments on the high level vision (refining the vision)**
- 2. Reviews and comments on the proposed powers/control statement**
- 3. Endorses the proposal to seek funding provision within the proposed devolution deal to deliver the vision**

1. Introduction

- 1.1 The West of England Partner authorities have held long standing aspirations to develop smart and integrated ticketing in the area as part of increasing the attractiveness, and removing barriers to, public transport and supporting the wider goal to grow the market; increase patronage; and reduce congestion.
- 1.2 In early 2016 it became clear that the landscape, in terms of technology; customer requirements; and the willingness for the authorities to take a greater role in delivery through new powers and funding opportunities, had changed due to the current approach of small scale projects and operators own commercial initiatives not delivering the integrated and customer centric outcome that was desired.
- 1.3 In May 2016 a workshop was held with officers from the four authorities, as well as the West of England Office, to begin work on:
 - a) Developing a high level customer centric vision for smart and integrated ticketing
 - b) Identifying high level requirements for, and approaches to, technology in order to support this vision
 - c) Identifying key areas where additional powers may be required to deliver both the vision and the technical requirements, should a partnership approach fail to do so, to inform current devolution 'ask' activities.

Notes from the workshop are included as **Appendix 2**

2. A vision for smart and integrated ticketing

2.1 The workshop identified key concepts under the three areas of Customer Experience and Technology as an Enabler which are summarised below:

Customer Experience

<ul style="list-style-type: none"> • Simplicity • Consistent Experience • Choice • Best Value 	<ul style="list-style-type: none"> • <u>Single branding</u> • Easy to communicate • Information • Wider than transport
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Technology as an Enabler

<ul style="list-style-type: none"> • One customer front end • One piece of technology will not suit everyone • Exploit technology that customers already have 	<ul style="list-style-type: none"> • Consistency of technology and performance • Customer accounts – back office does the work
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2.2 Based on the above the below draft vision statement has been developed:

Smart and Integrated Ticketing Vision

A unified smart payments and ticketing platform across all modes of public transport in the West of England area in order to provide a simple and consistent experience for all public transport users. We will deliver a customer focused system under a single brand with best value fare and pay as you go travel using the latest contactless and mobile technologies.

2.3 It should be noted that the workshop participants identified a clear need to better understand our customer needs and how they access public transport, to refine the vision in order to develop a detailed strategy and delivery plan.

3. Powers and Controls

3.1 The workshop identified key areas of power and control which would need to be addressed to guarantee successful delivery of the customer experience and technology vision. These areas/powers are summarised below:

Powers & Control

<ul style="list-style-type: none"> • Ability to create consistency across all public transport • Creation of a single offering for customers 	<ul style="list-style-type: none"> • Mandate common payment systems and methods • Common ticket rules and possibly a single ticketing scheme
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3.2 Based on the workshop session the below draft statement of powers and controls has been developed:

Smart ticketing objectives

In order to deliver the vision of smart and integrated ticketing West of England authorities shall:

- *Introduce a single brand, unified back office and common customer interfaces for smart ticketing*

- Simplify and harmonise ticket ranges across the area
- Deliver a common customer experience through introducing standard single ticket machine to be used on all buses
- Deliver common cashless payment and ticketing systems accepted on all buses in the area and for local rail. This will initially be based on an electronic purse stored on a smartcard before including other payment mechanisms and/or technologies
- Introduce best value fare and capping, through smart payments/ticketing

3.3 The matrix of powers available following introduction of the Bus Services Bill (see Appendix 1, page **Error! Bookmark not defined.**) indicate that delivery of the objectives described above will be greatly facilitated through the new **Enhanced Partnerships**. The West of England Mayoral Combined Authority (MCA) currently proposes that powers to franchise bus services be granted. These powers may be necessary to deliver non-ticketing objectives of the MCA; but also, where agreement to deliver the above ticketing objectives through EPs cannot be reached. As can be seen from the matrix of powers, franchising powers exceed those required for ticketing through Enhanced Partnerships.

3.4 Were the MCA to wish to set individual operator fare structures, this could only be achieved through franchising of services.

4. Delivery Approach

4.1 Development of the strategies and delivery plans will take time to complete and new powers/partnership working structures/funding sources from the bus bill and potential devolution deal will not be available until 2018. The West of England have however already invested in existing smart ticketing systems which, through negotiations with operators, could deliver quick wins over the next 12 to 18 months.

4.2 Phased Approach

It is proposed that a three stage approach be adopted in order to maximise the potential of existing systems and tickets already in place and deliver new systems and functionality in a staged approach over the next three to five years.

Phase 1: Quick wins

- Build on existing ITSO smartcards creating a universal smartcard e-purse accepted on all buses
- Attractive and simplified multi-operator ticketing

Phase 2: Simplifying existing ticketing

- Harmonised rules for area boundaries, consistent entitlement, and stages
- Expand e-purse and ticketing delivered in phase 1 to local rail (where and if possible)

**Expansion to local rail at this stage would likely be limited to specific lines/routes and be based on handheld validators. Gated stations are not included.*

Phase 3: Enhanced ticketing/technology refresh

- Common ticket and retail website and mobile app

- Standardise on-bus ticket machines
- Single customer account for all local bus
- Automatic correct fare calculation (record boarding and alighting)
- Fare capping / best fare calculation

Details of the proposed delivery phases and timeline are included in **Appendix 1**.

4.3 Funding

To achieve the vision the Authorities will be taking on a much greater role in ticketing than it has done in the past and therefore both capital and ongoing revenue funding will have to be committed (for both system setup/ development and ongoing management and administration of the common platform/brand).

Cost estimates for programme

Year	1 - 2	2	3	4	5	Total
Phase	1	2	3			
Capital cost (£k)	50	50	3100	100	100	3400
Revenue cost (£k)	50	50	100	250	250	700

**Note: the above cost estimates do not include costs associated with the setup of banking back office systems as it is assumed that a central system will be available through ITSO or another party (TfL/ TfGM/ big 5 bus operators)*

4.4 It is recommended that budget be ring-fenced in the proposed devolution deal to deliver Phases 2 and 3 as well as the ongoing revenue costs

4.5 A funding source for the initial Phase will need to be identified and allocated

5. Next Steps

1. Refine the vision and endorse
2. Refine/develop the activities/scope and cost estimates
3. Refine 'powers' statement to meet devolution process requirements
4. Confirm funding approaches for all phases
5. Engage with Enhanced Partnership strategy development task and finish group to define the bus strategy project (resources not yet identified)