CPCA Strategic Bus Review

Reference number 107607

10/01/2019



CAMBRIDGESHIRE AND PETERBOROUGH STRATEGIC BUS REVIEW: EXECUTIVE SUMMARY







IDENTIFICATION TABLE	
Client/Project owner	Cambridgeshire and Peterborough Combined Authority
Project	CPCA Strategic Bus Review
Study	Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary
Type of document	Executive Summary – Draft Final
Date	10/01/2019
File name	20180110 107607 CPCA Part 2 Draft Report v3 Exec Summary.docx
Reference number	107607
Number of pages	21

APPROVAL					
Version	Name		Position	Date	Modifications
1	Author	Neill Birch Ralph Anderson Peter Hardy	Project Director Project Manager Director	26/10/2018	Draft Report
_	Checked by	Neill Birch	Project Director	26/10/2018	
	Approved by	Neill Birch	Project Director	26/10/2018	
	Author	Neill Birch	Project Director	17/12/2018	
2	Checked by	Ralph Anderson	Project Manager	17/12/2018	Amended summary based on revised draft of final report
	Approved by	Neill Birch	Project Director	17/12/2018	or illustrations
	Author	Neill Birch	Project Director	10/01/2019	
3	Checked by	Ralph Anderson	Project Manager	10/01/2019	Revised Draft Final
	Approved by	Neill Birch	Project Director	10/01/2019	



1. INTRODUCTION

1.1 Study Purpose and Background

- 1.1.1 SYSTRA Ltd was commissioned by the Cambridgeshire and Peterborough Combined Authority (CPCA) in May 2018 to undertake a strategic review of bus service provision within the CPCA area. The study is intended to develop potential strategic proposals over a longer time horizon to explore opportunities for transformational change.
- 1.1.2 The timing of this report means that a number of key transport documents are in the process of being prepared, such as the Local Transport Plan for the CPCA, the GCP's Transport Strategy, and a number of detailed studies looking at delivering Cambridge's City Access package. As such, this Bus Review cannot, and does not, seek to present a single preferred solution for the network. It presents a range of options at a conceptual level which can help inform more detailed planning and design in the future through other studies. This is likely to include documents such as the future CPCA Bus Strategy, which will be developed as part of or in parallel with the Local Transport Plan.
- 1.1.3 For a number of the options presented, examples have been used to illustrate the types of incidences where these could be applied. These examples should not preclude the development of alternative approaches during more detailed planning of the network in other studies.
- 1.1.4 One of the key messages presented in this report is the need to consider different delivery models and funding this is highlighted by the step change that would be required in the delivery of the transport network if options such as those presented conceptually here were to be taken forward.

1.2 Structure of the Study

- 1.2.1 Previous work, documented in the study's Part 1 Report, looked in depth at the strengths, weaknesses, opportunities and challenges (SWOC) associated with bus-based public transport in Peterborough and Cambridgeshire.
- 1.2.2 This is summarised in the diagram on the next page. The work for Part 1 has formed the basis for a wide-ranging option generation exercise and sifting of potential options, until a coherent holistic set of proposed interventions has emerged covering short, medium and long terms, set out in the full Part 2 Report and summarised herein.
- 1.2.3 The Learning Points from the SWOC analysis formed the starting point for developing options to ensure that buses play a viable role in supporting economic development in the CPCA area and delivering the very challenging levels of mode shift required.

1.3 Structure of this Report

- 1.3.1 This report provides a summary of the recommendation from the study, and the implications with regard to delivery models and funding.
- 1.3.2 Below is a summary of the SWOC analysis from the Part 1 report.
- 1.3.3 Following this, the report: describes a range of conceptual interventions for the urban networks in Cambridge and Peterborough, and inter-urban and rural networks across the CPCA area; summarises potential delivery models for these transport options; and provides a high level implementation and transition plan.

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



STRENGTHS

- Good geographical network coverage, including strong rail network
- Frequent services on many corridors, especially in cities
- 90% of bus network provided commercially
- Ongoing investment in the network new technology, including RTPI, busway
- Park & Ride concept supported in Cambridge
- External funding for bus services
- Local environmental awareness
- Local commitment to active travel, especially cycling
- Active community transport sector
- Existing integration of school and rural transport
- Willingness to trial new approaches (e.g. Zume)
- Bus users generally positive about bus service experience

WEAKNESSES

- Inconsistent service offer, in particular in rural areas frequency, accessibility and journey time, times of day, information, etc.
- Inadequate coordination between services, especially Busway and P&R
- Unattractive journey times by bus, in particular in rural areas
- Crowding (on some peak services)
- Community transport provision inconsistent and restricted to users
- Some key travel desire lines not linked by direct bus new developments not served
- Congestion and conflicting priorities for road space (cycling versus bus)
- Excessive supply of car parking
- Bus/rail integration poor
- Staff recruitment challenging
- Limited market research by commercial operators limited appetite for innovation
- Limited competition amongst commercial operators
- Financial sustainability of existing commercial operations
- Inadequate public-sector funding
- Limited evening, Sunday services
- Complex public-sector delivery structure
- Inadequate multi-operator/multi-modal ticketing
- Costs of public transport to users too high

OPPORTUNITIES

- Air quality providing imperative to change
- City deal funding, work place charging levy
- Harnessing value from economic development
- Political appetite for change
- Younger people driving less
- Limited use of busway services by 16-24s
- Integration with other modes (e.g. cycling
- Emerging new technologies (information, delivery models) chance to revamp the image
- Eliminating inconsistencies of delivery
- Behavioural change especially at new developments
- New delivery approaches (e.g. commercial DRT)
- Not all services busy capacity to carry more
- Reconnecting rural areas to modern public transport
- Reallocation of road space
- Depot modernisation and location
- Greater partnership and collaboration (Transport for Cambridgeshire and Peterborough)

CHALLENGES

- Congestion
- PT keeping ahead of economic development
- Dispersal of growth
- Meeting ambitious mode shift targets
- Improving public perceptions of the bus
- Car and rail can be cheaper than bus, with parking charges providing the largest comparative cost disincentive for city centre access.
- Changing travel patterns, flexible working, online shopping, etc. challenging by bus
- Long term political support over multiple electoral cycles
- Inadequate finance available especially outside City Deal, also balance revenue/capital funding
- Labour shortages
- Operator uncertainty legislation, regulations
- Pace (and cost) of technological change
- Engaging with Maas providers
- Insufficient public-sector resources, especially staff
- Need to integrate short-term proposals with long-term aspirations (e.g. CAM)
- Relationships between stakeholders
- Providing infrastructure for electric vehicles

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607



2. INTERVENTIONS IN THE CITIES' NETWORKS

Establish Minimum Levels of Service

The concept of 'minimum levels of service' can be used to provide a more equitable network across time periods by adopting rules of provision for evening and Sunday services which relate to the core daytime frequency. This could be explored for both cities.

Table 1. Relationship of Daytime to Evening/Sunday Bus Frequencies

MAIN DAYTIME FREQUENCY BASED ON MON-FRI 0900-1700 PROVISION	MINIMUM EVENING AND SUNDAY FREQUENCY PROVIDED MON-SAT AFTER 1900, AND SUNDAY 1200-1800
Every 10 minutes or more frequently	At least every 20 minutes
Every 12-15 minutes	At least every 30 minutes
Every 20-30 minutes	At least every 60 minutes
Less frequent than every 30 minutes	No service unless required by specific demand

Committed Equity of Access for Areas of Deprivation

A commitment could be made to serve areas of high deprivation with a defined 'attractive' level of service provision, reviewed regularly to ensure this is in line with the most attractive service levels provided in each city in terms of single service frequency.

As growth takes place, areas of deprivation should be prioritised, where possible, to ensure that they have access to new employment opportunities, and services (such as retail, health, and education) are maximised.

Enhanced Bus Services in Peterborough and Cambridge

- 2.1.1 In both Peterborough and Cambridge, the characteristics of high quality bus services should be as follows, to maximise attractiveness to potential passengers:
 - Highest possible viable frequency (subsidised if necessary), with at least a turn-up-and-go frequency during the main periods of demand;
 - Direct routings, balanced by ensuring that key demand generators and attractors are served en route;
 - O Suitable vehicle capacity for peak demand; and
 - High quality in-vehicle features commensurate with the type of service offered.

Consider targeting the creation of a turn-up-and-go service. This would largely require enhancing all major radial corridors from Peterborough and Cambridge city centres to at least a bus every 12 minutes (Mon-Sat daytime).

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



Enhanced Radial Bus Services in Peterborough

Where growth is targeted at specific outer suburban locations, then bus services could be reconfigured to offer more direct linkages to the city centre.

By this reasoning, examples of such changes would be to provide enhanced or new peripheral links between:

- O City Centre Norwood & Paston
- City Centre Hampton
- City Centre Great Haddon

A funding arrangement which does not rely solely on s106 Agreements may be required to ensure this is feasible where required most.

Bus Service Pairs could be Cross-linked across Cambridge City Centre

Consider the feasibility of providing targeted cross-city services for high demand movements, aligned to congestion reduction or bus priority interventions.

Merging Park & Ride Services with the Wider Cambridge bus network

2.1.2 Although we acknowledge that establishing a high-quality P&R network has been positive in attracting new users to buses in Cambridge, strategically we believe that the future lies with a more holistic approach. Firstly, additional capacity will be required in the bus system, as described in section 1.4, and the current overlapping of conventional and P&R bus services will prove wasteful of scarce

resources (vehicles, drivers and road capacity). Secondly, improving quality on the conventional bus network will reduce the need to differentiate P&R services by way of enhanced features.

In Cambridge, part of the increased efficiency of resourcing could be achieved by completely merging the existing P&R services with the wider city bus network.

Enhanced Bus Service Provision for Key Employment Centres in Cambridge

While detailed planning would be required, and some work is already underway to progress access to these areas, some examples of the types of changes which could be made to the network include:

- Cambridge Science Park provide enhanced links to Cambridge North station via busway; introduce peripheral bus service linking to West Cambridge (e.g. mirroring CAM proposals until CAM delivered).
- Cambridge East and Airport cluster introduce peripheral link to Cambridge North station and Science Park if suitable route can be identified across River Cam.
- Cambridge Biomedical Campus receives enhanced services as part of improvements for Addenbrookes Hospital area.
- West Cambridge enhanced service provided from review of overlapping services; introduce peripheral bus service linking to West Cambridge (mirroring CAM proposals until CAM delivered).

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



Bus Services Adjusted to Complement CAM Proposals

2.1.3 As the CAM proposals are still being developed, routing and service details are only indicative at present. Furthermore, as significant changes may be undertaken to the bus network in the period preceding the opening of the CAM, detailed planning of the bus network cannot be undertaken to specify exact service changes to maximise integration with the metro.

However, some general principles can be applied when considering future integration:

- The P&R strategy should complement the CAM, replacing services where overlapping, and expanding, relocating or providing additional sites where gaps in capacity, service level, or network coverage exist;
- Maximise the potential of feeder services;
- Provide first and last mile solutions across modes, including fixed route bus, demand responsive transport, and Mobility as a Service style transport provision (in addition to walk, cycle and car clubs for example);
- O Integrate with the existing and proposed rail network; and
- Ensure communication, branding, and ticketing is integrated with other services where possible, presenting a unified transport network to the public.

Quality Bus Corridors – Cambridge

Consider Potential Quality Bus Corridors, for example:

- Madingley Road from city centre to P&R site;
- Milton Road from city centre to junction with busway;
- Hills Road from city centre to Addenbrookes Hospital via Cambridge station;
- Together these quality bus corridors on Milton Road and Hills Road would fill the central gap in the busway.

Cambridge City Centre – Addressing Modal Conflict

2.1.4 Delivering radical mode shift, per the targets discussed in the Greater Cambridge Partnership's Transport Strategy - Future Public Transport Requirements (July 2018) will require radical measures, both in the form of carrots but also as sticks.

We therefore recommend investigating constraints on motorised access to the central city core in Cambridge, complemented by a edge-of-centre loop arrangement for conventional bus services and a central area bus service provided by smaller, zero emission vehicles.

- 2.1.5 This will also underscore the existing, unusually high mode share for walking and cycling in Cambridge and ensure that this continues into the future, helping to minimise the pressure on local public transport and the need for high levels of public funding for bus service enhancements.
- 2.1.6 While this report has concentrated on the benefits for bus operation, there are also benefits to greenhouse gas emissions, air quality and

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



health from helping create a low-traffic city centre, and uncongested and efficient operation of vehicles through the network.

Embedding Quality Services Early

2.1.7 Successful implementations of new bus services need to be demand-led (i.e. responses to clear travel needs), but must be delivered as early as possible in the life of major new developments. Travel habits quickly become embedded, and if there is an inadequate bus service then that travel habit may well revolve around the private car.

Therefore, it is critical that bus services for new developments continue to be provided at the start of activity at the location, and that of sufficient frequency and adequate routing to make them attractive to current *and future* users. Services also need to be tailored to the nature of the development – for example, new industrial locations with shift-working arrangements will need bus services which adequately cater for those shift times.

Flexible Services and First/Last Mile Solutions

- 2.1.8 Modern working practices, with a significant increase in flexible hours, part-time working, and working from home now result in even more pressures on public transport to be adequately flexible to match users' travel expectations and the alternative flexibility offered by the car. First mile/Last mile solutions can play a significant role in this attractive flexibility, with commercially-funded demandresponsive solutions now being piloted in a number of parts of the UK as below.
- 2.1.9 A recent development in the provision of bus transit is the advent of urban demand responsive transit (DRT), an 'Uber for buses'. In this style of operation, passengers can request a bus pick-up using an app at a location convenient to them, rather than relying on conventional

bus routes and stops. It is often advertised as an intermediate service between taxis and buses: cheaper than a taxi, but more flexible than a bus. This solution would address concerns over infrequent or irregular bus service patterns and can help plug the gap in areas not best suited to conventional fixed route service.

The types of location which may be suitable for urban DRT in Peterborough and Cambridge include, but are not limited to:

- Norwood and Paston (Peterborough)
- Stanground (Peterborough)
- Hampton and Great Haddon (Peterborough)
- Cambridge Science Park and Regional College
- Cambridge East and Airport cluster
- Cambridge Biomedical Campus and Addenbrookes Hospital
- Cambridge West development area

The Role of Taxis

2.1.10 Delivering a holistic and flexible transport experience should include consideration of how taxis interact with the wider public transport offer in the cities. Offering transport users a flexible experience requires a new approach to payment for regular transport requirements, and there would be considerable merit in developing a partnership with local taxi owners as they offer a ready-made opportunity to provide flexible local transport solutions.

Vehicle Quality

2.1.11 Vehicle standards across both city fleets should be best in class if they are to offer an attractive alternative to the private car and support the radical mode shift targets:

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



Best standard of interior finish, high quality seats, and selected features such as WiFi, and charging points should be standard features.

Multi-Modal Integration

- 2.1.12 Bus/rail integration is a key consideration at Peterborough, Cambridge, Cambridge North and the proposed Cambridge South stations. Inter-modal integration depends on two key components:
 - Physical integration; and
 - Journey coordination.
- 2.1.13 Physical integration at all three existing stations in Peterborough and Cambridge is reasonable. However, the number of buses passing close to Peterborough station is very limited.

We would recommend enhancements to the physical linkages between the bus and rail stations in Peterborough, including improved walking routes and clear signage. The distance to walk is quite acceptable if adequate signage is provided.

- 2.1.14 Cambridge station has high quality physical integration between bus and rail, and is served by a generally adequate network of buses, including busway services.
- 2.1.15 Facilities at Cambridge North are adequate, but the station is very poorly served by local bus services, including those along the busway.

Taking these points into account, we would suggest exploring:

 Routing additional busway journeys via Cambridge North station; and

- Providing local feeder bus services to Cambridge Science Park, as well as proposed new developments at the Cambridge Airport cluster.
- 2.1.16 Journey coordination needs to be carefully considered. Timetables should therefore be carefully examined to ensure they are fit for all potential purposes. At locations and times of day when trains and buses are less frequent, careful consideration needs to be given to matching timetables so that adequate timetabled connections are provided where these would be of value.
- 2.1.17 The proposed station at Cambridge South should conform to best practices as regards physical integration and supported by a network of buses offering a suitable feeder function as soon as the station opens.
- 2.1.18 The introduction of CAM as a new, additional public transport mode will also need careful integration with existing bus services with best practice at each interchange and a redesigned local bus network which avoids abstraction from CAM and provides it with the complementary feeder functions

New Vehicle Technologies

Take a Lead in AV Operation

To release resources for additional local bus services described throughout this report, we recommend continued support for AV technology operation existing busway operations, releasing drivers over significant proportions of the network, and exploiting existing crew facilities at locations such as St Ives and the Stagecoach bus depot adjacent to the busway in Cambridge.

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



3. RURAL AND INTER-URBAN BUS SERVICES

A Suitable Support and Development Framework is Needed

- 3.1.1 The following key principles are considered important to underpin and provide a suitable framework for the support and development of rural public transport:
 - Recognise that there will be a continuing need for rural public transport and that it will require financial support.
 - Take a holistic view of urban and rural public transport networks, recognising the linkage between the two. Exert some form of considered, central planning over rural networks to ensure they develop in an integrated and efficient way.
 - It will be important to involve rural communities throughout, both to articulate needs and to assist in the formulation and implementation of solutions.
 - Collaboration by all interested parties (policy makers, commissioners and providers) is vital to achieve integration, economies of scale and effective use of resources.
 - A range of different operators and types of service (mixed economy of provision) will be necessary to find the most effective solutions for different areas. These may include private bus, taxi and private hire vehicle, community transport, public sector inhouse vehicles, car clubs and car share schemes, all promoted across a single integrated service, perhaps provided via a MaaS platform.
 - Taxi licensing reform may assist in service developments, and community transport operators may benefit from some consolidation of certain functions.
 - Inter-urban bus services will form the framework for local networks, with more sparsely populated areas served by demand responsive services, feeding into the main network.

- There will be a presumption against low frequency fixed route rural bus services, which should be replaced by more flexible demand responsive arrangements feeding into a network of rural hubs.
- Hubs would be linked to each other and major urban centres by high quality inter-urban bus services running at least every 30 minutes.
- Operators need to be incentivised to develop and improve services, rather than merely operate services in a passive way as specified by commissioning authorities. Again, partnership approaches should help, together with the use of more flexible procurement methods that look to achieve desired outcomes (as opposed to focusing on inputs and outputs).
- The value placed on services by users should be recognised, with fares set to reflect this and in a way that will help sustain services in the future.
- From a health and social care perspective, the organisation of non-emergency patient transport needs to be reviewed and reformed in order that it can be planned and provided in an integrated way with other types of transport.
- Use technology to support information provision, ticketing and on-demand service provision.

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019

Page 10/21



Overall, there needs to be a comprehensive approach; it needs to be bold but practical and affordable, offering stability and opportunities to achieve economies of scale.

A Coordinated Approach Could be Provided by the CPCA

A centrally planned approach, led by the Combined Authority and taking forward concepts along the lines of those presented at the end of this section, is required to achieve a coordinated network.

3.1.2 It may be beneficial to explore the organisation of non-emergency patient transport to be considered as part of this, enabling that to be integrated too and adding to the demand for a flexible responsive transport service, but acknowledging that the early focus should be on modernising the delivery of rural public transport for general users, without the distraction associated with specialist transport provision.

Inter-urban bus services, together with any local rail services, could form the framework for the rest of the network.

3.1.3 If these bus services were supported, then they could become part of a franchised network planned and controlled by the Combined Authority. If the services were operated commercially, they could remain in the control of the operator, if it agreed to meet various conditions, including co-operation with feeder services, integrated ticketing and assurances on maintenance of services in the long term.

Delivering Rural Transport

3.1.4 The network could be developed in partnership with operators and include a mix of fixed route and flexible services.

The following principles are recommended:

- Fixed routes should only be provided where there is a recognised bulk demand, otherwise comprehensive DRT would be specified.
- Whatever delivery model is adopted, most rural services will require subsidy. Packages of service contracts could be put out to tender. Contractors could include commercial bus companies, taxi operators, on-demand providers, community transport or local authority in-house (where allowed by legislation).
- Common branding and promotion of services and integrated ticketing will likely be key.
- Vehicles may be multi-purpose and be used to convey all types of passengers.

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



Maximise the Role of Hubs via Integration

The idea would be to plan the network in the most efficient way, with local fixed or flexible transport feeding into the main fixed public transport services at hubs, with all services running to clock-face timetables.

Involve Communities

3.1.5 It will be important to involve local communities, recognising that they have local knowledge and insight, will highlight needs and demands and can contribute to solutions.

New initiatives would be encouraged and supported, such as the crowd-sourcing of services to test out new potential routes. Also, initiatives to use available capacity, such as the ability to sign-up to receive messages about available travel opportunities at relatively short notice.

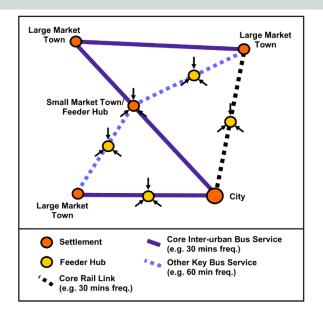
3.1.6 There are various ways to mobilise community action. One method, which is used extensively on the UK's rail network, with around 60 in place across the country, is that of Community Partnerships. Community partnerships act as a means of connecting local communities to the railway and train operators that serve them. They act alongside local, regional and national partners to improve social inclusion, community well-being, as well as promoting sustainable and healthy travel. There have been efforts to introduce community partnerships focusing on bus usage, e.g. in Leicestershire, however the success of rail partnerships is yet to be realised for community bus partnerships. A case study example is provided alongside.

Establishing Community Bus Partnership along similar principles to rail partnerships could be explored.

3.1.7 We believe that empowering local rural communities to engage with their transport provision is fundamental to making them a success. Where additional operators are required, such as community transport providers or locally-based taxis, the CPCA could help support the establishment of suitable Social Enterprises in rural areas, ensuring that funding for rural transport is focused on employers based in those areas wherever possible.

Network Concept

A stronger network concept for rural and inter-urban services should be considered, providing feeder hubs and services to connect low access areas to core transport links.



CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



4. DELIVERING MODERN PUBLIC TRANSPORT

4.1 Holistic Delivery of Public Transport

4.1.1 To meet the radical mode share targets for the Combined Authority area, transport needs to be positioned as a fundamental 21st Century utility, similar to telecommunications. Certain building blocks are critical to this.

It is suggested that communication, branding, and ease of user access are reviewed in line with network options to ensure an effective approach is taken.

- 4.1.2 Firstly, the services themselves need to be fit for purposes: Providing high quality, high frequency city bus services, using best in class vehicles, and supported by world-leading infrastructure, alongside seamless integration with other sustainable modes (walking, cycling, rail and CAM).
- 4.1.3 The vision is for public transport to be an unobtrusive part of everyday living for residents and workers in the CPCA area, a utility they use without stopping to think about it, and within which usage patterns can be flexed at will to meet changing daily needs. The model we have in mind is that of mobile phone usage, which is now simply taken for granted as part of most people's lives.
- 4.1.4 In the same way that mobile phone users have no need to understand the technology and back-office systems which support their use of the phone wherever they may be in the world, then the objective should be to ensure that public transport users have the same ease and flexibility of use.
- 4.1.5 Transport provision will still involve multiple providers: bus operators, community transport, the CPCA itself, other public sector

authorities, train operating companies, cycle hire providers, community car clubs, and the CAM franchisee for example. Providing a seamless marketing front to these multiple service providers will be critical in positioning public transport as a 21st Century utility, so branding must be unified and information coordinated so that a coherent message is always provided.

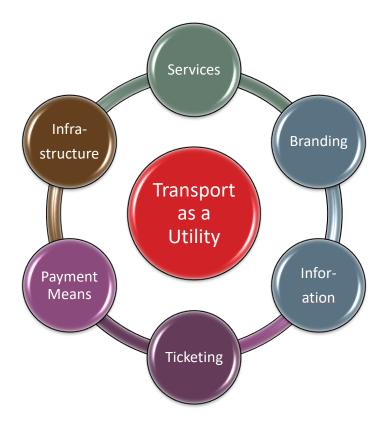


Figure 1. Holistic Delivery of Public Transport in CPCA area

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019

Page 13/21



- 4.1.6 Fundamental to this repositioning of public transport as a utility will be payment means and ticketing. Replicating the flexibility and seamless nature of mobile phone pricing suggests a move towards multimodal payment contracts encompassing all relevant transport modes in the CPCA area, following mobile phone practices. In principle, as with a mobile phone, subscribers could choose between a fixed monthly contract payment and/or the opportunity to pay as they go for selected services (a combination of the two being feasible, similar to how roaming works with mobile phones).
- 4.1.7 Taxis offer a flexible response to both rural and urban transport requirements, and we would recommend that they are incorporated into its holistic delivery.
- 4.1.8 Infrastructure is also a key part of the transport service offer, and needs to be delivered holistically alongside all other elements for example, ensuring that physical accessibility measures are coordinated with provision of suitable vehicles.
- 4.1.9 Many of these aspects are covered by the Mobility as a Service concept, as described more fully in the Part2 Report.

4.2 Fares Initiatives

We would therefore recommend the following fares initiatives for consideration:

- O Simplified, flat fare system for Peterborough and Cambridge;
- Discounted fares for young apprentices;
- Discounted fares for active jobseekers;
- Retention of current free travel arrangements for ENCTS cardholders;

- Discounted fares for over 60s on community transport
- Promotional packages for new residents and employees of new developments suggested 50% discount for one year.
- 4.2.1 Fares initiatives can be made easier to implement by some of the changes resulting from the Bus Services Act 2017, described later.

4.3 Political Support

- 4.3.1 Delivering radical reform to how transport is delivered, such that it becomes a core utility underpinning economic success in the CPCA area, and delivering the radical mode shift targets, will require strong and consistent political support.
- 4.3.2 This support will be required to secure sufficient budget allocations, maintained over a prolonged period of time, and to give coherent and consistent support, across multiple electoral cycles.

4.4 Delivery Agencies

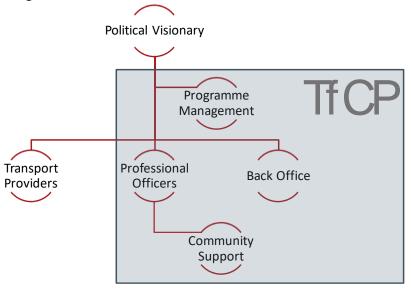
- 4.4.1 Delivering this radical agenda requires changes to the delivery model, as at present many of the components are either not in place or are not delivered holistically.
- 4.4.2 There will be a wide variety of stakeholders involved in repositioning transport as a 21st Century utility. Delivering a radical mode shift compared to current travel patterns will not be achieved easily, and will certainly require a very clear focus on adhering to the vision, and delivering the components which will make up the coherent, holistic programme.
- 4.4.3 Drawing together professional officers from the current transport authorities, delivery of the necessary back office systems, and

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019

Page 14/21



- ensuring community support as the programme progresses will require radical changes to how transport is currently delivered, in the form of a modern transport delivery agency.
- We refer to this as Transport for Cambridge and Peterborough, and a 4.4.4 schematic illustration of the high-level relationships is shown in Figure 2.



Stakeholder Relationships - Transport for Cambridge and Peterborough Figure 2.

4.5 **Delivery Models**

The concept of a holistic approach to transport as a utility supporting 21st century development aspirations, articulated in the radical mode shift targets for the CPCA area, will require integration of these delivery models.

The CPCA requires a delivery model which supports radical enhancements to public transport provision in Peterborough and Cambridgeshire, with buses playing a key role in that future transport provision, building on existing services particularly in the two cities. It is clear, however, that existing delivery models face challenges in supporting an integrated approach to the full range of strategic interventions which are likely to be required, and there is a need to explore how cross-subsidisation might help to enhance overall service levels throughout the area.

Whilst delivery of these future aspirations may be feasible through partnership, this requires positive engagement by the Operators as well as the transport authorities, and in the absence of a willingness to partner in a positive way, Mayoral Authorities such as the CPCA are uniquely placed to deliver the alternative -Franchising.

We therefore recommend that the CPCA develops a Business Case comparison of alternative delivery models, including both Enhanced Partnership and Franchising, in compliance with the requirements of the Bus Services Act 2017.

² TfL, Network Performance Summary, 2018/19 Q1: http://content.tfl.gov.uk/2018-19-g1-network-performance-summary.pdf, accessed on 24/10/2018.

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019

¹ TfL, http://content.tfl.gov.uk/uploads/forms/lbsl-tendering-and-contracting.pdf, accessed on 24/10/2018.



4.6 Funding

- 4.6.1 Capital funding for enhanced public transport in the CPCA area should be available through the City Deal funding, albeit that a significant proportion of that may be required for the CAM project.
- 4.6.2 However, providing enhanced and high quality bus-based transport always relies very heavily on revenue funding. Many of the initiatives will require dedicated staff to drive them forward, and where additional and enhanced bus services are recommended it is likely that these will require targeted subsidies because it is assumed that if they were already commercially viable then the bus operators would be providing them.

Delivering enhanced bus services will require additional revenue funding support from the public sector, identification of additional revenue streams (e.g. workplace parking levy), a reduction in overall operating costs, or – most likely – a mixture of all three.

4.7 Achieving Financial Sustainability

- 4.7.1 As we described in the Part 1 Report, there are a range of different sources of funding for local bus services:
 - Fares paid by the travelling public;
 - Reimbursement paid to operators and transport authorities under BSOG;
 - Subsidy paid by local transport authorities for selected noncommercial bus services; and

- Reimbursement paid to operators as compensation for free travel provided through the English National Concessionary Travel Scheme (ENCTS).
- 4.7.2 We would currently estimate that total revenue collected on bus services in the CPCA area is in the order of £75m per annum³. Where enhancements are made to local bus services, there will be a need to consider the impact on financial sustainability. BSOG reimbursement will increase if additional services are operated, however it represents a relatively small proportion of overall funding, circa £5m per annum in recent years even a 20% increase in total eligible mileage operated in the CPCA area would generate only £1m of additional BSOG funding from DfT.
- 4.7.3 Currently just short of £10m per annum is used to fund the councils' ENCTS obligations. Whilst operating additional bus services would potentially generate a requirement to increase reimbursement to operators, this might be offset (at least in part) by:
 - Increased generation factor⁴ if services became more attractive;
 and
 - Reductions to the fares basket calculation (if discounted fares are commonplace, then arguably this should be reflected by reducing the average fare calculation used to compute reimbursement to operators).
- 4.7.4 Any increase in ENCTS obligations would, of course, require to be met from local authority funds, and therefore the potential impact of enhanced public transport services on ENCTS obligations must be taken into account, particularly if provided through an Enhanced Partnership. We have already discussed the potential to raise

⁴ The calculation that ensures that operators are only recompensed for travel that takes place because of the free nature of the fare

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019

Page 16/21

³ Based on analysis in Part 1 report (section 6.4) which identified circa £65m per annum on the three main commercial bus operators



- additional funds by seeking donations from ENCTS travelcard users to help partially offset their travel costs, but have recommended against this based on Government guidance. Providing additional rural services via community transport operators could result in discounted fares for certain categories, replacing free travel for ENCTS cardholders.
- 4.7.5 Total transport pilots have identified that enhancements to rural transport might be deliverable within existing budgets, if these were pooled and deployed more effectively. Our proposals recommend extending that principle to take a totally holistic approach to rural transport delivery, merging all delivery models into a single approach tailored to the requirements of the CPCA's rural districts, and focusing travel around a network of hubs linked by enhanced interurban services. The target here would be no additional funding.
- 4.7.6 Operating enhanced bus services which are not directly commercially viable (ie where the additional revenue collected falls short of the additional operating costs) would require funding from the CPCA at present, the two councils spend just over £3m per annum on supporting local bus services. Enhancing services as envisaged to meet the radical mode shift targets is likely to require a significant increase in financial support.
- 4.7.7 Currently the three principal commercial bus operators in the CPCA area earn circa £10m per annum in operating profit. This suggests that the commercial operators are earning circa 13%-15% operating margin in the CPCA area. From this profit, they need to reinvest for the future, as well as using the profit for shareholder returns such as dividends, and meeting taxation liabilities.
- 4.7.8 If, say, one-third of the profits earned in the CPCA area were available to reinvest into the network, this could represent an additional £3.5m funding per annum, more than doubling the amount spent on subsidised local bus services by the two councils at present.

- 4.7.9 There are two means by which this funding can be released into the local bus network:
 - Agreeing a set of interventions jointly with local operators through an Enhanced Partnership plan and its associated schemes – with operators agreeing to part-finance initiatives in partnership with the CPCA; or
 - Establishing one or more franchising areas covering the CPCA, whereby competitive tendering for contracts could release some of the existing profit based on the London example quoted above.
- 4.7.10 It should be noted, however, that both approaches imply increased costs compared to present, particularly the franchising approach which not only would require ongoing procurement and contract management resources, but also implies a significant commitment of one-off fees to prove the case for franchising (see below).

Conclusions on Sustainable Financing – Short/Medium Term

- 4.7.11 Additional revenue funding is critical to meet the radical mode shift targets established for the CPCA area.
- 4.7.12 It is possible that additional services could be secured through robust dialogue with local operators, and tied up through an Enhanced Partnership which would, in any case, need to be considered as an alternative to franchising. Franchising might eventually allow for a doubling in funding for local bus services in the CPCA area, albeit that initial upfront preparation costs may be equivalent to the first year of this funding.
- 4.7.13 As an alternative, franchising could be focused firstly on the rural areas (where services are already largely subsidised) to deliver the holistic approach described, with franchising as a backstop for enhanced city and inter-urban bus services if partnership fails to

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



achieve the desired results. Targeting holistic rural transport provision within existing revenue budgets would mean that funds released either through partnership or franchising could be focused on enhanced local bus services within Cambridge and Peterborough, and on inter-urban links within the CPCA area.

4.7.14 Capital funding can then be targeted at facilitating schemes, such as rural bus hubs, expanded bus priority, and investment in the back office systems which would support the positioning of public transport as a utility supporting economic growth in the CPCA area.

Conclusions on Sustainable Financing – Long Term

- 4.7.15 As set out already, transition to a suitable 21st Century model for public transport is likely to shift the landscape of financing, because there will be far more pooling and sharing of revenue if a holistic and seamless service is offered to the public.
- 4.7.16 In a franchised model this would be immaterial as TfCP would be taking all revenue risks and simply paying contractors supplying services through appropriate Service Level Agreements. Otherwise there would need to be a methodology of identifying equitable shares of revenue, and subsidising service provision which would not otherwise be viable from revenue shares alone. The complexities of doing so with any degree of transparency and certainty are likely to result in a trend towards a franchise model led by TfCP.

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



5. IMPLEMENTATION AND TRANSITION PLAN

- 5.1.1 Figure 3 shows an outline implementation plan for the recommendations set out in this report.
- 5.1.2 Initially we had anticipated discrete sets of interventions, divided into short, medium, and long-terms, albeit with some commonality and cohesion across the timescales.
- 5.1.3 However, for the following reasons, we consider that a more holistic approach is critical:
 - The scale of change from the current "business as usual" is very significant given the radical nature of the aspiration for modal shift to public transport – in turn meaning that radical change is required to support all interventions, starting as early as possible; and
 - The likelihood of forthcoming major changes to how transport is delivered (Mobility as a Service, emerging new technologies, and repositioning future public transport as a fundamental modern utility like telecoms and internet access) means that adopting a short/medium/long term perspective is inappropriate.
- 5.1.4 We have therefore developed a broadly 10 year plan for implementation and transition.
- 5.1.5 Achieving the radical aspiration for mode shift is likely to require delivery of all the recommendations, which have been designed in a holistic manner rather than as a menu from which only a selection is taken forward. The implementation plan recognises these holistic inter-dependencies, whilst at the same time identifying some groupings of recommended interventions, identified by colour coding.

Groups of Interventions

- Enhancements to bus services in Peterborough and Cambridge
 BLUE
- Enhancements to Busway services GREEN
- Enhancements to Inter-Urban bus services PURPLE
- Delivery of CAM project RED
- Enhancements to Rural public transport provision YELLOW
- New delivery models, including payment means GREY

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019



Indicative Implementation Plan Figure 3.

Figure 3. Indicative Imp	olementati I I					ı						
	SHORT TERM MEDIUM TERM							2020	LONG TERM			
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030+
Procurement and completion of a business case to assess different delivery model options, including engagement with operators around likely Enhanced Partnership and Franchising options												
Basic establishment of TfCP, including preparation to deliver outcomes of the business case – scope of responsibilities, what will be delivered in-house, what will be contracted out, governance arrangements, etc.												
Consultation on business case, completion of an independent audit												
Decision on the delivery model by the mayor, and implementation of switch to new delivery model												
Expanded role for TfCP across the delivery of projects that follow												
Engage with operators to improve city bus services – define gaps, identify how to fill those gaps												
Exercise targeting immediate improvements to busway services												
Identify opportunities for modern, urban demand responsive services												
Improvements to Inter Urban bus services – start to create the network of hubs into which the modernised rural transport will link, and the services which will link those hubs (some exist already)												
Restructuring of Rural Transport Delivery – begin to identify holistic future model, combining best aspects of existing provision and targeting consistency of rural service across the area												
Expanded and targeted bus priority network, particularly in Cambridge but also as required in Peterborough (and elsewhere)												
Delivering CAM – preliminary work to deliver proposals												
Expansion of Urban demand responsive transport, in conjunction with local operators												
Progressive roll-out of holistic and consistent rural transport services												
Rural Hubs – completion of a series of rural hubs, providing comprehensive facilities for their local areas, and linked into the upgraded inter-urban bus network												
Delivery of CAM and revision of bus services to complement CAM operations												
Restructure internally to engage with emerging Mobility as a Service (MaaS) opportunities – process continues into medium term												
Branding & Information Provision – establish unique and identifiable branding and promotion for all public transport in CPCA area												
Develop integrated networks with other modes, particularly rail												
Begin switch to a modern, MaaS-based public transport service, with harmonised payment systems, information provision, etc												
Completion of switch to modern, MaaS-based public transport service												

CPCA Strategic Bus Review	
Cambridgeshire and Peterborough Strategic Bus Review: Executive Summary	107607
Executive Summary – Draft Final	10/01/2019

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.systra.co.uk

Birmingham - Newhall Street

5th Floor, Lancaster House, Newhall St, Birmingham, B3 1NQ T: +44 (0)121 393 4841

Birmingham - Edmund Gardens

1 Edmund Gardens, 121 Edmund Street, Birmingham B3 2HJ T: +44 (0)121 393 4841

Dublin

2nd Floor, Riverview House, 21-23 City Quay Dublin 2,Ireland T: +353 (0) 1 566 2028

Edinburgh – Thistle Street

Prospect House, 5 Thistle Street, Edinburgh EH2 1DF United Kingdom T: +44 (0)131 460 1847

Glasgow - St Vincent St

Seventh Floor, 124 St Vincent Street Glasgow G2 5HF United Kingdom T: +44 (0)141 468 4205

Glasgow - West George St

250 West George Street, Glasgow, G2 4QY T: +44 (0)141 468 4205

Leeds

100 Wellington Street, Leeds, LS1 1BA T: +44 (0)113 360 4842

Londo

3rd Floor, 5 Old Bailey, London EC4M 7BA United Kingdom T: +44 (0)20 3855 0079

Manchester - 16th Floor, City Tower

16th Floor, City Tower, Piccadilly Plaza Manchester M1 4BT United Kingdom T: +44 (0)161 504 5026

Newcastle

Floor B, South Corridor, Milburn House, Dean Street, Newcastle, NE1 1LE
United Kingdom
T: +44 (0)191 249 3816

Perth

13 Rose Terrace, Perth PH1 5HA T: +44 (0)131 460 1847

Reading

Soane Point, 6-8 Market Place, Reading, Berkshire, RG1 2EG T: +44 (0)118 206 0220

Woking

Dukes Court, Duke Street Woking, Surrey GU21 5BH United Kingdom T: +44 (0)1483 357705

Other locations:

France:

Bordeaux, Lille, Lyon, Marseille, Paris

Northern Europe:

Astana, Copenhagen, Kiev, London, Moscow, Riga, Wroclaw

Southern Europe & Mediterranean: Algiers, Baku, Bucharest, Madrid, Rabat, Rome, Sofia, Tunis

Middle East:

Cairo, Dubai, Riyadh

Asia Pacific:

Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila, Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia, Washington

