Improving Regional Bus Services

Reference number GB01T24A11

ANNEX B: THE HEARTBEAT NETWORK

SYSTRA

IMPROVING REGIONAL BUS SERVICES

THE HEARTBEAT NETWORK

IDENTIFICATION TABLE	
Client/Project owner	England's Economic Heartland
Project	Improving Regional Bus Services
Study	The Heartbeat Network
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APPROVAL

Version	Name		Position	Date	Modifications
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	Checker	Keith Weightman	Associate	04/09/2024	
	Approver	Keith Weightman	Associate	04/09/2024	

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1. INTRODUCTION

1.1.1 SYSTRA has been commissioned by England's Economic Heartland (EEH) to undertake work on improving regional bus services in the area. EEH is a substantial region, incorporating commuter belt, major towns and cities and a substantial rural area. It stretches from Swindon in the west to Cambridgeshire and Hertfordshire in the east.

1.1.2 One of SYSTRA's tasks is to provide the Local Transport Authorities (LTAs) within the area with optional material in light of the 2024 BSIP Review undertaken by LTAs for the Department for Transport. SYSTRA's work focused on improvements to regional bus and coach services, which generally cross LTA boundaries within EEH and act as key links, complementing the rail network.

1.1.3 SYSTRA suggest naming the proposed network the 'Heartbeat' network, given its importance to England's Economic Heartland and its role in supporting the economic and social wellbeing of the area. It is also a memorable name that will compliment and ease the task of delivering a purposeful marketing and awareness campaign aimed at promoting the new and improved bus and coach network.

1.2 The Heartbeat Network

1.2.1 Heartbeat is a proposed network that not only connects hubs and key destinations within EEH, but also enhances cross-LTA journeys while integrating seamlessly with the existing local bus networks. The Heartbeat proposals does not seek to replace successful existing routes, but rather to enhance them by improving reliability, speed, frequency, comfort of service, as well as where feasible providing the links that have been identified as missing in previous EEH studies, particularly the connectivity studies and Regional Bus Study.

~~1.2.2~~ The actual implementation of the Heartbeat network remains the subject of a separate piece of work which needs to be undertaken by the EEH as this will involve a review of ownership and operating models. The purpose of this of this document is to provide details of what the enhanced Heartbeat network should look like and to summarise the benefits the improved bus network would bring to the region.

1.3 Regional Connectivity

1.3.1 Buses are the backbone of EEH's increasingly attractive and expanding public transport offering. The local bus and coach network catered for some 130 million miles of passenger journeys in 2023 while returning a 20% increase on the previous year.

1.3.2 It is therefore of key strategic importance that the EEH focus its effort of providing platforms that will not only build on its past successes but also foster further growth and service improvements.

2. BACKGROUND TO THE HEARTBEAT NETWORK

2.1.1 In September 2023, EEH held a Bus Symposium which was attended by local and combined authority leaders, their senior officials, DfT and the private sector. This demonstrated the

strong political intent within the region to improve bus journeys and set the direction for EEH's current work programme on bus and mobility hubs.

2.1.2 EEH is a polycentric region, made up of relatively smaller cities, market towns, villages, and rural economic hubs. More than 35% of its population live in small market towns and their rural hinterlands. There are large parts of the region not served by rail, making journeys by bus the only viable public transport mode. The region's bus network is also vital to connecting to stations which sit on our (most radial) main lines. East West Rail - one of the UK's biggest transport infrastructure projects - will transform east-west rail journeys, but only if stations have high quality door-to-door connectivity. High quality bus connectivity to these stations is of vital importance to East West Rail's overall success.

2.1.3 Recent economic analysis by commissioned by EEH Cambridge Econometrics has shown the economic value of the EEH region to the UK economy. Of the seven STB regions covering the entirety of England, the EEH region has created the most jobs, delivered the fastest economic growth, has the highest exporting intensity, the highest share of R&D jobs, and is home 33 of top 10 ranking innovation clusters in the UK. However, slow productivity growth (only 0.2% p.a) means EEH is now less-productive than national average (20-years ago, it was more productive). Improvements to connectivity, including through improved regional bus travel, will help drive productivity growth.

2.1.4 The region has several pockets of significant overall deprivation and many places in the region also score particularly poorly on the 'access to housing and services' deprivation metric (an indicator of poor transport connectivity) and living environment (an indicator of poor air quality, potentially caused by high congestion). Buses can help address these challenges; by connecting our communities, they enable our residents to access schools, employment, and essential services (such as shops and health facilities) and help foster a sense of belonging and cohesion and support individuals to participate in social activities and enjoy entertainment.

2.1.5 Heartbeat's bus and coach services therefore fall into three categories, complementing rail:

- Higher-frequency short bus routes linking residents to major centres and major business destinations.
- Lower frequency services at around every 30 minutes, operating reliably all day and linking hubs in the region, scheduled with other routes for a 'pulse' arrival and departure to optimise interchange at hubs throughout the region.
- Coach services, providing longer-distance services linking major centres and airports within and around the region, again with interchange optimised at regional hubs.

2.1.6 Less frequent National Express and Megabus coach services also provide links around the region (for example from Cambridge and Peterborough to Luton Airport or from Swindon to London). However, although they are important services to the destinations, we have not included them in the network and maps, as they operate relatively infrequently and often require pre-booking, unlike the rest of the Heartbeat network.

2.1.7 In addition, the Oxford – Buckingham - Milton Keynes – Bedford route is not included in our Heartbeat network, as this runs hourly and may become less commercially viable with East – West Rail. We have proposed regular Buckingham – Milton Keynes services via other routes.

In addition, we propose a Milton Keynes – Bedford – Cambridge route via the Millbrook Technology Park (as major potential destination in the EEH Bus Strategy work), which replaces both the Milton Keynes – Bedford section of the route and the 905 between Bedford and Cambridge, providing improved links to Central Bedfordshire.

2.1.8 We do not anticipate sufficient passenger demand for a direct Heartbeat-frequency link between Stansted Airport and Luton Airport, following discussions with the airports recently and analysis of airport travel data provided. Whilst there is some interchange between the airports, this is limited and unlikely to justify a Heartbeat link. National Express currently provide nine daily coach services throughout the day in each direction linking the airports via Hitchin, which in the long-term may become a regional bus route option (as suggested in Connectivity Study 5). However, Stansted Airport identify their markets as local areas (both customers and staff) and from mainly rail or existing bus links in London, Cambridgeshire, and East Anglia (their main staff draw). Whilst there may be some 'latent demand' from wider EEH, again Stansted Airport believe this is low and unlikely to go beyond the existing National Express links to Cambridge, Oxford and Luton Airport, alongside the good rail services from Stansted Airport.

2.1.9 With a few exceptions, in the interests of integrated inter-modal public transport, we have not suggested Heartbeat services where there will be direct rail links by 2030 that serve the same key locations with a regular frequency. This approach may of course be revisited at a network development stage.

3. TABLE OF PROPOSED NETWORK CHANGES

3.1.1 Table 1 overleaf details the proposed changes to the network, the reasons behind them and their likely commercial stand-alone viability, based on operation with a standard-size single-deck bus. As discussed in our Network Delivery document, initial operation with minibuses could reduce operating costs and increase commercial viability.

3.1.2 The table does not contain existing routes that already run at the minimum frequency (at least every 30 minutes Monday – Saturday and with a presence in the evenings and on Sundays). However, it should be noted that these existing routes still may require improvements to their reliability, operations, comfort, and marketing to meet the aspired Heartbeat quality.

Table 1. Proposed network frequency changes

Names	Strategic Goal	Bus Narrative	Top 50 Cross-Boundary Flows	Connectivity Studies	Housing Growth Planned	Employment Growth Planned	Potential for Commercial viability with standard bus
Aylesbury - Winslow - Buckingham - Milton Keynes	Strong connections for Aylesbury and Buckingham also connect to East-West Rail stage 1 via Winslow	Current service is appropriate but only hourly (half-hourly in peak hours). Increase to half-hourly (giving quarter-hourly to MK by two different paths, via Buckingham or Leighton Buzzard). (PVR-based cost estimated £0.6m per year)	14,000 daily trips MK - Buckingham	Y - Supported by Inter-urban Bus Priority Measures	The service links towns with over 8,000 new dwellings planned by 2030; were 5% of the estimated trips generated by these developments captured by bus these developments could be expected to generate 2500 new bus trips. Note, new trips generated will be spread over a range of origin-destination flows, and different routes linking the same flows		Medium
Aylesbury - Leighton Buzzard - Milton Keynes	Improved Leighton Buzzard connections as well as additional Aylesbury - Milton Keynes secondary link	Current service is appropriate but only hourly. Increase to half-hourly (giving quarter-hourly to MK by two different paths, via Buckingham or Leighton Buzzard). (PVR-based cost estimated £0.6m per year)	Leighton Buzzard - Milton Keynes 20,000 trips; Aylesbury-Dunstable 4,000 trips; Leighton Buzzard - Aylesbury 6,000	Y - Supported by Inter-urban Bus Priority Measures	The service links towns with over 8,000 new dwellings planned by 2030; were 5% of the estimated trips generated by these developments captured by bus these developments could be expected to generate 2500 new bus trips. Note, new trips generated will be spread over a range of origin-destination flows, and different routes linking the same flows		Medium
Banbury - Brackley - Buckingham - Bicester	Provides vital links for Brackley and Buckingham to nearby towns and the rail network	New half-hourly service (PVR-based cost estimate £1.2m per year), incorporating the current Banbury – Bicester route.	Banbury - Brackley 6,000 daily trips; public transport trips taking at least 50% longer than car trips	Y - Supported by Inter-urban Bus Priority Measures	The service links towns with over 3,700 new dwellings planned by 2030; were 5% of the estimated trips generated by these developments captured by bus these developments could be expected to generate 1,100 new bus trips.		Low
Wellingborough – Wollaston – Bozeat - Milton Keynes - Towcester - Silverstone - Buckingham	Connecting Towcester and Buckingham to areas of employment towards Silverstone and Milton Keynes; providing a rail link for Silverstone via Milton Keynes; providing a direct link from Wellingborough	New half-hourly service. Current low provision suggests a challenging environment for bus. (PVR-based cost estimate £1m per year). Provides bus service from Bozeat and Wollaston to MK for employment, leisure and access to MKC rail station and Coachway. Could replace W8 that	Mk-Towcester has 8,000 daily flows with public transport journey time over 2.5 times car journey time	Y - Supported by Inter-urban Bus Priority Measures		There are 245 hectares of employment developments planned between Milton Keynes and Towcester; were 5% of the estimated trips generated by these developments captured by bus this would generate 3,000 new daily bus trips.	Low

	to Milton Keynes and Silverstone.	currently links Bozeat, Wollaston with gaps varying between 40 and 120 mins. This would provide a regular service.				
Northampton-Towcester - Brackley - Oxford	Enhanced interurban bus services between Oxford and Northampton	The current service is less than hourly. Increasing this long route to a recommended half-hourly frequency would be resource-intensive (PVR-based cost estimated £1.8m per year)	N	Y - Enhanced interurban bus services between Oxford and Northampton EEH000182A	The service links towns with over 10,000 new dwellings planned by 2030, mainly at the two ends of the route: Oxford and Northampton; were 5% of the estimated trips generated by these developments captured by bus these developments could be expected to generate nearly 3,000 new bus trips.	Low
Northampton - Kettering	This creates a strong link between Kettering and Northampton as well as onward rail connections from Northampton	The current hourly service makes a lot of stops at the Northampton end. Add an extra service each hour with an under-an-hour journey time to increase service frequency to every 30mins with every other bus being a faster service. (PVR-based cost estimated £0.4m per year)	Northampton-Kettering is one of the top 10 highest daily cross boundary flows in EEH with 11,000 daily trips. Public transport is more than 50% slower than car travel for the journey.	Y - Northamptonshire Mass Rapid Transport Scheme EEH000171A	The service links towns with over 5,000 new dwellings planned by 2030; were 5% of the estimated trips generated by these developments captured by bus these developments could be expected to generate 1500 new bus trips.	Medium
Northampton - Wellingborough - Rushden - Peterborough	A Northamptonshire MRT scheme offers important links between each major town and end-to-end	Existing link from Northampton to Peterborough is via Corby, hourly and takes approximately 3 hours. New limited stop route from Northampton via Wellingborough and Rushden to Peterborough offering a half-hourly service. (PVR-based cost estimated £1.6m)	Northampton-Wellingborough 33,000 daily trips (#2); Northampton-Rusden 8,000 daily flows; journey time over 2.5 times car	Y - Northamptonshire Mass Rapid Transport Scheme EEH000171A/ Enhanced Interurban Public Transport Network along the A45 and/or A605 EEH000181A	The service links towns with over 8,000 new dwellings planned by 2030; were 5% of the estimated trips generated by these developments captured by bus these developments could be expected to generate 2,400 new bus trips.	Low

Peterborough - Corby	Provides a vital link between EMR and Peterborough's connections in the north-west of EEH.	Currently a slow (80mins) hourly service exists; Add an extra service each hour with an under-an-hour journey time to increase service frequency to every 30mins with every other bus being a faster service. (PVR-based cost estimated £0.4m per year)	N	Y - Northamptonshire Mass Rapid Transport Scheme EEH000171A	The service links towns with over 2,300 new dwellings planned by 2030; were 5% of the estimated trips generated by these developments captured by bus these developments could be expected to generate 650 new bus trips.		Low
Leighton Buzzard - Luton - Hitchin - Stevenage	A Leighton Buzzard - Stevenage BRT would provide faster links on key routes. This service would provide links into the London Northwestern Railway at Leighton Buzzards and Thameslink and the Midland Main Line at Luton.	A Luton- Hitchen half-hourly service exists, but where every other service runs via Luton Airport every other service is slow. Luton - Leighton Buzzard currently has a frequent bus service but is poorly served requiring interchange or slow speeds after existing guided busway ends at Dunstable. A busway would provide faster links on key routes already served at or close to 30-minute frequencies. (Capital costs of busway not estimated; speed increases may be achievable by rerouting alone after busway improvements).	Luton - Hitchen 11,000 daily trips (top 10 cross boundary flows); Stevenage - Luton 6,000 daily trips. This route is more than 50% slower by public transport than by car.	Y - Leighton Buzzard - Stevenage BRT	The service links towns with over 13,000 new dwellings planned by 2030; were 5% of the estimated trips generated by these developments captured by bus this would generate 3,900 new daily bus trips.	Luton Airport anticipates a significant expansion in coming years. Staff (and passengers) will benefit from a link east-west from further afield. An Aylesbury – Luton Airport link has been sought by Buckinghamshire Council. Some buses on this route could run on to Aylesbury, or pulse interchange connections could be timetabled at Leighton Buzzard with the Aylesbury – Milton Keynes link.	Medium/High (operational – not including busway construction cost)
Luton - Hemel Hempstead - High Wycombe	Hemel Hempstead would be effectively linked to employment and leisure opportunities in both High Wycombe and Luton and onward travel via	Service 1 (High Wycombe-Hemel Hempstead) runs hourly. Doubling this frequency and extending route from Hemel Hempstead to Luton as a limited stop service would provide a half-hourly	Luton - Hemel Hempstead: 16,000 daily trips (top 5 cross boundary flows). This route is more than 250% slower by public	Y - complements New Strategic Mobility Hub serving Hemel Hempstead	The service links towns with over 8,000 new dwellings planned by 2030; were 5% of the estimated trips generated by these developments captured by bus this would generate 2,400 new daily bus trips.		Medium

	Chiltern and Midland mainlines	connection between all locations. (PVR-based cost estimated £0.9m per year)	transport than by car.				
Cambridge - Bedford - Millbrook Technology Park - Milton Keynes	Millbrook Technology Park would be linked to both Bedford and Milton Keynes. Existing railway station requires 25-minute walk to access much of the site due to track layout. A bus could provide services to within under 400m of destinations. Bedford is the nearest town to Cambridge without a strong frequency bus or rail connection. In due course this route might be revised with opening of East – West Rail to Cambridge.	Current service only between Bedford and Cambridge hourly, and half-hourly in the peak. Increase to every 30mins throughout the day (PVR-based cost estimated £1.3m per year) between Milton Keynes and Cambridge via Millbrook Technology Park. No current bus provision enters the site. A new shuttle bus operating half-hourly would be required. A relatively small number of destinations could be reached given the distances due to road layout making this a relatively expensive service (PVR-based costs estimated £1.0m per year). An alternative solution for Millbrook would be a shuttle bus from the Milton Keynes railway station.	These two cross-boundary flows account for more than 20,000 daily trips (MK-Millbrook 13,000 trips (top 10) and Bedford-Millbrook 8,000 trips). Trips from Milton Keynes and Beford to Millbrook Technology Park are more than 2.5 times slower by public transport than by car	N	The route between Bedford and Millbrook Technology Park contains some housing developments totalling over 6,600 dwellings; were 5% of the estimated trips generated by these developments captured by bus this would generate 1900 new daily bus trips. Bedford and Cambridge both have high levels of housing developments planned totalling over 7000 dwelling; were 5% of the estimated trips generated by these developments captured by bus this would generate 2000 new daily bus trips.	There are 125.5 hectares of employment developments planned along this route; were 5% of the estimated trips generated by these developments captured by bus this would generate 3000 new daily bus trips. There are 90 hectares of employment developments planned along the route between Bedford and Cambridge; were 5% of the estimated trips generated by these developments captured by bus this would generate 2200 new daily bus trips.	Medium
Daventry - Rugby	Daventry's poor regional connections will be improved with faster, more frequent bus services connecting it to Rugby and onward rail connections.	Existing hourly service takes over an hour so an increase in frequency and speed is required (PVR-based costs estimated £0.4m per year).	Daventry - Rugby has 10,000 daily trips with very slow public transport journey times - more than 2.5 times slower than by car	Y - Daventry - Rugby bus route	Daventry has high forecast housing growth with over 3500 new dwellings planned; were 5% of the estimated trips generated by these developments captured by bus this would generate over 1000 new daily bus trips.		Medium

Peterborough - Cambridge	Peterborough and Cambridge are both forecast to have high housing and employment growth. Bus could offer a low-cost alternative by extending the already-recommended Huntingdon - Cambridge link	Currently the 788 coach service runs approximately every 3 hours, stopping in Cambridge on the way from Peterborough to Heathrow. Extending the recommended Huntingdon - Cambridge service to Peterborough at a 30-minute frequency would serve this route. (PVR-based cost estimated £0.8m per year).	Peterborough - Huntingdon has 5,000 daily trips but these are well-served by rail	N	Peterborough and Cambridge have high forecast housing growth with over 7000 new dwellings planned; were 5% of the estimated trips generated by these developments captured by bus this would generate over 2000 new daily bus trips.		Low
Aylesbury – High Wycombe-Heathrow	A coach link to Heathrow Airport has been an aspiration for Aylesbury and this was a link identified for development with Heathrow expansion. This would also transform the vehicle quality and widen the public transport market for north-south journeys in Bucks.	Currently public transport to Heathrow for Aylesbury is by rail and through London or to travel to Oxford to link with the coach. Linking this area with Heathrow connects a number of employees and users of the airport. (PVR-based cost estimated £1.8m per year)	N	N	The service links towns with substantial new housing planned in coming years. Connectivity to Heathrow Airport as an employer and as a route to foreign destination and markets would be welcomed.	Expansion planned at Aylesbury, Wycombe and Heathrow and areas around.	Low

4. TABLE OF HEARTBEAT NETWORK ROUTES

4.1.1 The bus routes in Table 1 are new links or existing links that increase in frequency. The below table contains all routes that have been incorporated as part of the Heartbeat network. (Where an existing bus service is suggested for extension or other significant transformation, it is named 'New').

4.1.2 As well as the wider branding of 'Heartbeat' network, routes or route corridors could be rebranded with individual names (as currently practiced with Reading Buses' network and as seen on Oxford Tube and The Airline coaches). For example, the existing 850 bus could be branded as the 'Regatta' bus.

Table 2. Current bus routes in the Heartbeat network (as of September 2024)

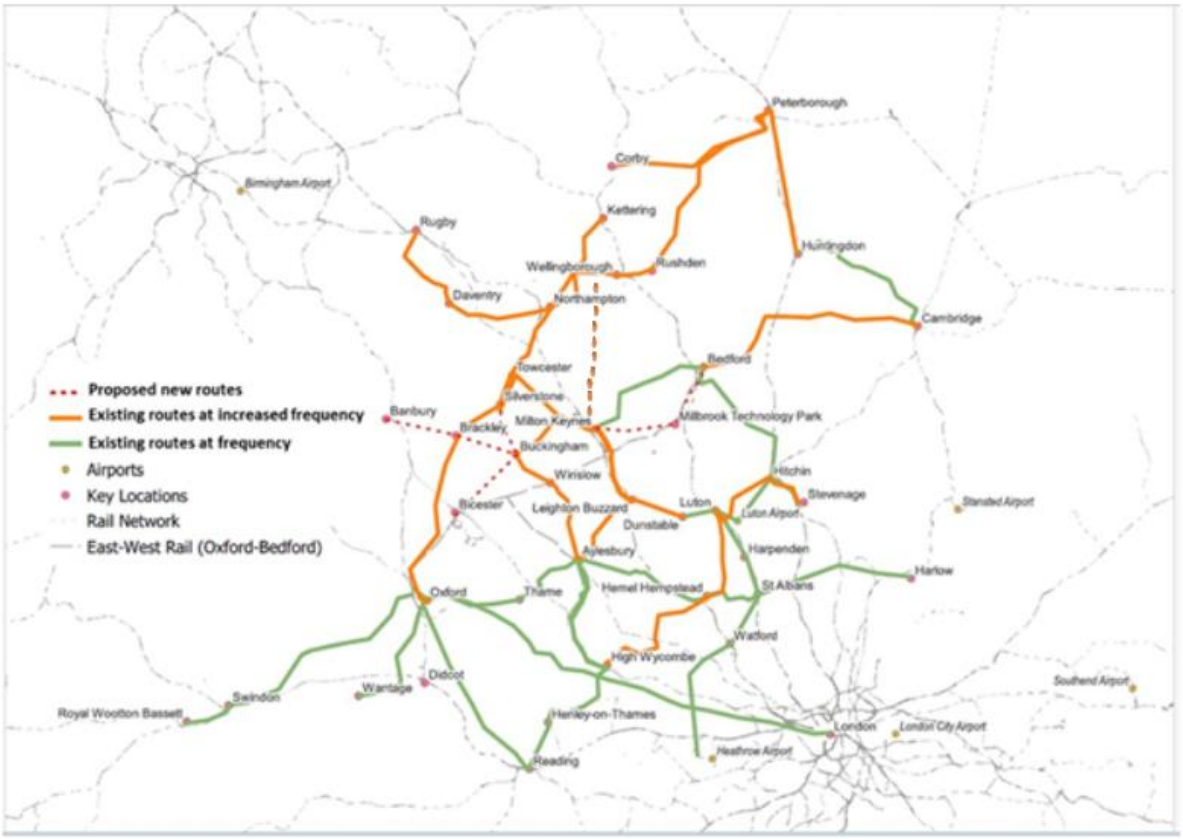
Bus Route Number	Origin - Destination	At target frequency?	Operator
S6	Swindon - Oxford	Yes	Stagecoach
55	Royal Wootton Bassett - Swindon	Yes	Stagecoach
S9	Wantage - Oxford	Yes	Stagecoach
X1	Wantage - Oxford	Yes	Oxford Bus Company
850	Reading - Henley-on-Thames - High Wycombe	Yes	Carousel
X20	Oxford - Thame - Aylesbury	Yes	Redline
300	High Wycombe - Aylesbury	Yes	Redline
Oxford Tube	Oxford - London	Yes	Stagecoach
The Airline	Oxford - High Wycombe - Heathrow - Gatwick	Yes	Oxford Bus Company
X5	Aylesbury - Hemel Hempstead	Yes	Arriva
302	Hemel Hempstead - St Albans - Welwyn Garden City	Yes	Arriva
321	Luton - Harpenden - St Albans - Watford	Yes	Arriva
100/101	Luton - Hitchin - Stevenage	Yes	Arriva
Busway A/B	Cambridge - Huntingdon	Yes	Stagecoach
F70/F77	Luton - Dunstable - Leighton Buzzard - Milton Keynes	Yes	Arriva
MK1	Milton Keynes - Amazon campus - Luton - Luton Airport - Bedford	No	Stagecoach
9A/9B/9C	Stevenage - Hitchin - Bedford	No	Stagecoach
X4	Aylesbury - Leighton Buzzard - Milton Keynes	No	Arriva
87	Northampton - Brackley	No	Stagecoach
88	Silverstone - Northampton	No	Stagecoach
X6	Aylesbury - Winslow - Buckingham - Milton Keynes	No	Arriva
X10	Northampton - Kettering	No	Stagecoach
X4	Northampton- Wellingborough - Corby - Peterborough	Between Northampton and Corby	Stagecoach
D1	Daventry - Rugby	No	Stagecoach
724	Harlow - St Albans - Watford - Heathrow Airport	No	Arriva
788	Peterborough - Cambridge	No	National Express
New	Northampton - Oxford	-	
New	Banbury - Brackley - Buckingham - Bicester	-	
New	High Wycombe - Hemel Hempstead - Luton	-	
New	Wellingborough - Milton Keynes - Towcester - Silverstone - Buckingham	-	
New	Northampton - Towcester - Brackley - Oxford	-	
New	Northampton - Wellingborough - Rusden - Peterborough	-	
New BRT	Leighton Buzzard - Luton - Hitchin - Stevenage	-	
New	Luton - Hemel Hempstead - High Wycombe	-	
New	Bedford - Millbrook Technology Park - Milton Keynes	-	
New	Aylesbury - Princes Risborough - High Wycombe - Heathrow	-	
New	Milton Keynes - Millbrook Technology Park - Bedford - Cambridge	-	

5. SCALE MAP OF HEARTBEAT NETWORK ROUTES

5.1.1 Figure 1 below provides a scale map of the Heartbeat network and includes existing links (which currently operate to a 30-minute frequency Monday – Friday frequency) in green. Links with proposed increased frequencies are in orange and proposed new routes are indicated as a red dashed line.

5.1.2 Rail links are shown in grey. The East-West Rail layer supplied and used in this map shows the Aylesbury branch, so we have retained it. Discussions have indicated that the Aylesbury branch of east-west rail is unlikely before 2030, so we have taken the Aylesbury branch away from the conceptual map in section 4.

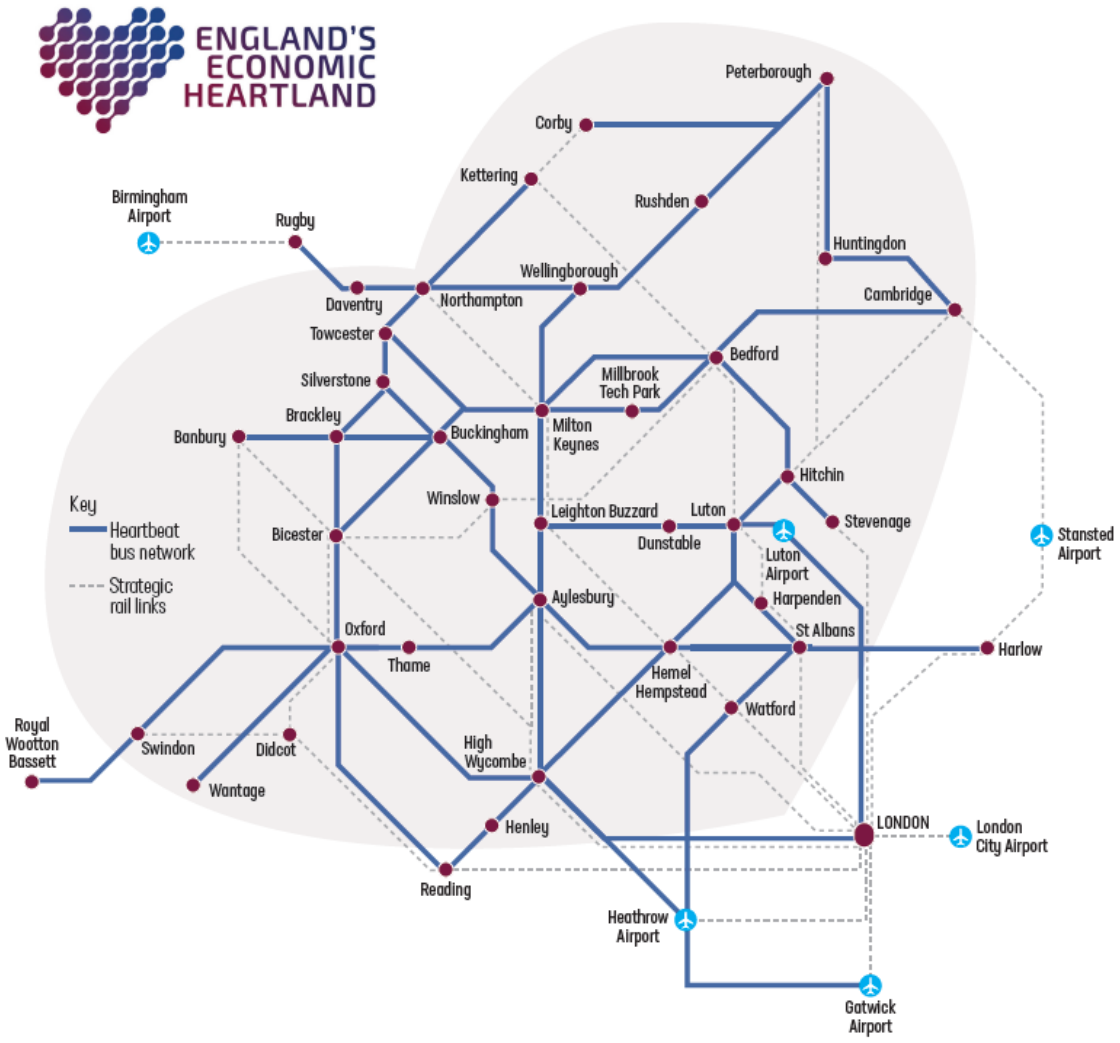
Figure 1. Scale map of Heartbeat network routes



6. CONCEPTUAL MAP – HEARTBEAT NETWORK 2030

6.1.1 Below is a conceptual map of the regional bus and strategic rail corridors as we see in 2030, from the development and contents above, plus what we currently know of the East-West Rail implementation schedule.

Figure 2. England's Economic Heartland 'Heartbeat' network map



7. NEXT STEPS AND RECOMMENDATIONS

7.1.1 We recommend that the EEH Board, working with the Local Transport Authorities, proceed with the development of a Heartbeat network. On a regional basis, this will provide a safe, reliable, simple, regular and comprehensive bus service and improve the network for bus and regional coach travel in EEH (as part of a wider sustainable travel network).

7.2 Next Steps

7.2.1 To develop the Heartbeat network, the following steps are required:

- Firstly, further work is required to refine the peak vehicle requirement (PVR) for the new routes as well as the supporting costs which will lead to a gaining a better and more robust understanding of the deliverability, viability and nature of the long-term support (funding/resourcing staff and infrastructure) that will be needed to deliver the proposed bus network.
- Secondly, a prioritisation exercise should be initiated to identify and prioritise which improvements should be implemented first and which service improvement would bring about the biggest gain per unit of available funding.
- It will also be important to launch or revitalise initiatives to better understand the needs of target passenger markets, in terms of service expectations such as reliability, timetabling, traveller experience etc. This could also include initiating behavioural science research to identify methods for communicating with existing current and potential customers and identify avenues for increasing usage and fostering modal shift.
- It is also essential that the means of paying for public transport and the ticketing offerings available are reviewed and, where appropriate, re-engineered or repriced to meet the needs of the users.
- The ticket offering should also be integrated with and supportive of, the wider marketing initiative which should reflect the ethos of the Heartbeat initiative and be tailored around the needs and aspirations of the core target markets and the overriding need to provide them with an attractive, easy to use, value for money public transport offering. This may involve clarifying route numbers, branding routes and removing service number duplications. It should certainly include co-ordinating the scheduling of services to allow smooth interchange between key routes at Heartbeat hubs.
- We recommend the EEH fully engage and consult with LTAs / Bus Operators at an early stage about these proposals and harvest and encourage their involvement, ideas and feedback.

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

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