



West Midlands
Combined Authority

WMCA Board

Date	19 March 2021
Report title	Coventry Electric Bus City - Full Business Case
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Report has been considered by	WMCA Strategic Hub Transport for West Midlands Leadership Team Decision Making Strategic Leadership Team Strategic Transport Officers Group Programme Board Investment Panel

Recommendation(s) for action or decision:

The WMCA Board is recommended to:

- (1) Authorise the Full Business Case for Coventry Electric Bus City under the Government's Phase 2 of the All-Electric Bus Town competition.
- (2) Note the estimated cost of the project which is inclusive of the £50 million funding from Government.
- (3) Note that the WMCA are the accountable body for the entirety of the funding package and any costs above the funding from the Department for Transport.

- (4) Authorise the allocation of £5 million from the Investment Programme to fund the WMCA contributions to infrastructure upgrades subject to the extension of the Investment Programme affordable limit being agreed
- (5) Note that the scope and delivery of the project continues to be refined and that the risks to scope and delivery uncertainty are mitigated by the project's risk management strategy.
- (6) Approve the delegation/s to the WMCA Monitoring Officer and WMCA Finance Director to enter into the various funding agreements and contracts which would be reasonably required to enable delivery of the project.

1. Purpose

- 1.1 The purpose of this report is to seek approval from the WMCA Board for the Full Business Case for the Coventry Electric Bus City under the Government's Phase 2 of the All-Electric Bus Town (AEBT) competition. To successfully secure Government funding for this project, it is essential that the Full Business Case (FBC) is approved by the WMCA Board by 19th March 2021.

2. Background

- 2.1 The Department for Transport (DfT) launched the AEBT competition in February 2020, with up to £50 million in grant funding to be made available to allow one town or city within England to make the transition to a bus network operated fully by electric powered buses. The AEBT is an important pilot programme which will help to inform the DfT's future work on decarbonising the bus fleet and delivery on the Government's commitment to deliver at least 4,000 zero emission buses and to tackle air quality and reduce greenhouse gas emissions. The AEBT includes a number of key aims:
- To act as a pilot to understand what can be achieved when there is a real commitment to move all buses in a place to electric zero-emission;
 - To understand the impact this can have on improving air quality and greenhouse gases in a place;
 - To understand better the challenges of running a wholly electric bus fleet;
 - To understand the impact that an electric fleet can have on running costs, patronage and passenger satisfaction;
 - To support bus manufacturers in the development of zero emission technology.
- 1.2 In June 2020, the West Midlands Combined Authority (WMCA), as the strategic transport authority for the West Midlands, submitted two Expressions of Interest (EOI) at this Phase 1 stage for Coventry and Sandwell, which had themselves been shortlisted from a list across the seven authorities.
- 1.3 The DfT set out on 5 January 2021, the details to devolve responsibility for the development and approval of a Full Business Case to the WMCA, for Phase 2 of the AEBT competition in Coventry. This included a number of assurances to enable the business case development to be devolved solely to the WMCA. The Sandwell bid was not selected by the DfT.
- 1.4 A working group has been established to oversee the business case preparation, led by Transport for West Midlands, in partnership with Coventry City Council, Warwickshire County Council and representatives of local bus operators operating current bus services within Coventry. The business case has been developed following HM Treasury's Green Book and DfT's Transport Analysis Guidance (TAG) and Value for Money Framework. It includes a plan for monitoring and evaluation of the pilot against the objectives of the WMCA and AEBT competition.

- 1.5 The landscape within which the bus industry is operating has changed significantly since the submission of the original bid, with the full impacts of the decline in bus patronage resulting from the COVID-19 pandemic and associated social and economic changes now beginning to be understood. What has previously been a very commercial bus network currently requires significant public funding support, and the ability of bus operators to invest in new buses has been compromised. One local bus company, DeCourcey, has ceased trading since the EOI was submitted.
- 1.6 Due to this challenge the working group have worked extremely closely with the bus operators to ensure that they can still support the level of investment required to ensure the full delivery of this project. It is still considered appropriate that the opportunity to secure up to £50 million of funding from Government, for the improvement of the local bus fleet operating within Coventry should be pursued. Coventry City Council and Warwickshire County Council both remain supportive of the bid, and based on the work outlined here bus operators are also supportive of the business case development and have provided letters of support.
- 1.7 If successful, the project will see new electric buses come into operation in Coventry over the next four years, meaning that by the end of 2025 every local public bus service in the city (including cross-boundary services between Birmingham, Solihull, Warwickshire, Worcestershire and Leicester) will be operated by a zero-emission electric vehicle.
- 1.8 This investment is part of a continued stream of interventions to reduce bus emissions in the region on the path to zero. This began with the adoption of the Low Emission Bus Delivery Plan by the Combined Authority in 2017. The Vision for Bus, adopted in 2019, committed to accelerate the transition to zero-emission buses in the region and achieve the cleanest bus fleet in any metropolitan area of the UK. Through delivery of this major pilot in Coventry, which will be amongst one of the largest single city transitions to electric buses in the western world, the region will gain immense experience and insight and be well placed to work with future partners to ensure further buses of the 4,000 committed by the Government are secured for other parts of the region over the coming years. It will complement other supporting investment including:
 - the delivery of zero-emission hydrogen buses on Sprint corridors later this year, which will operate into Birmingham, Sandwell, Solihull and Walsall.
 - re-powered single-deck electric buses.
 - a framework contract to supply pantograph chargers to support electric bus operation, initially looking to support bus services in Wolverhampton and Sprint.

- 1.9 The Business Case demonstrates the positive rationale for this investment, with a low value for money metric and outlines how it is anticipated the programme will be delivered successfully on time and within budget. The project's value for money category provides a succinct summary of the outcome of the complex economic appraisal, in a consistent approach to Government standards. The carbon impacts of the project have been monetised using published carbon values for the valuation of greenhouse gas (GHG) emissions. The values applied to changes in GHG emissions for transport appraisal are currently under review by the Department for Business, Energy & Industrial Strategy (BEIS). In part due to recent changes in the UK's GHG emission targets of achieving net zero emissions by 2050 (adopted in June 2019) as well as the Paris Climate Agreement (signed in 2016). In recognition of this and until updated carbon values are available, it is required to report the project GHG impacts using current published high carbon values as a sensitivity test. The value for money assessment of the high values sensitivity test remains positive for this investment, with a medium value for money metric, demonstrating the sensitivity to the carbon values applied.
- 1.10 It should be emphasised that this is a pilot programme to be delivered over a four year period during which time there may be changes that require the delivery approach to be reviewed. Technology will develop, costs will stabilise, and the regulatory framework may change. For example, WMCA is currently reviewing its powers under the Bus Services Act 2017, assessing the most effective way to deliver bus policy in the future, which includes a consideration of greater levels of intervention in the bus market, including bus franchising. The proposed approach outlined in the Business Case is intended to maintain the flexibility to keep the delivery mechanism for this project under review so that it can be adapted to ensure it has every chance of success in a changing external environment.

3. Financial Implications

- 3.1 The overall funding and spend for the project can be summarised as follows:

Funding Source (£m)	Vehicle upgrades	Base diesel cost	Depot Charging	Power upgrades	On-street Charging	Project Management and contingency	Total
Department for Transport	36.9		7.4	3.5	2.1		50.0
West Midlands Combined Authority	0.7	3.0	0.2	0.3	0.4	4.1	8.7
Warwickshire County Council	0.3	1.6	0.1	0.1	0.3		2.4
Operators	11.3	64.1	2.3	0.8	-		78.4
Total	49.2	68.8	9.9	4.7	2.8	4.1	139.5

- 3.2 The Department for Transport are providing a grant of £50 million towards the required upgrades to vehicles and infrastructure, up to maximum of 75% of the additional cost. The remainder of the upgrade costs are funded by commercial operators, WMCA and Warwickshire County Council.
- 3.3 The commercial operators are funding 25% of the additional costs for electric vehicles over diesel vehicles, depot charging facilities and the associated power upgrades, totalling £78.4 million.

- 3.4 WMCA and Warwickshire County Council also provide supported services within the area and will be required to fund the 25% of additional costs in a similar way to the commercial operators.
- 3.5 The costs for the vehicles for supported services are to be revenue funded and WMCA will use existing funding in the 2021/22 budget and Medium-Term Financial Plan for current supported services and planned upgrades to diesel vehicles from Euro IV to Euro VI engines for this purpose. This paper requests capital funding from the Investment Programme of £0.5 million, contained within the £5m request, for potential upgrades to depot charging and power upgrades for supported services.
- 3.6 This scheme as currently planned also provides pantograph charging provision available to any operator. As this is not specific to a commercial operator, this will require capital funding from the WMCA Investment Programme of £0.4 million (contained within the £5m request) towards the 25% upgrade contribution. Warwickshire County Council will be providing capital funding of £0.4 million towards pantograph charging provision.
- 3.7 There is also a requirement for WMCA Investment Programme funding of £0.9 million towards ongoing project management over the 5-year delivery life of the project, and monitoring and evaluation.
- 3.8 The costs of the infrastructure upgrades being delivered by WMCA have been compiled using third party quotations, with contingencies applied due to the potential for unforeseen utility costs arising from the power supply upgrades.
- 3.9 The total capital funding requirement from the WMCA Investment Programme is therefore £5 million.
- 3.10 The overall funding from WMCA is therefore as follows:

	£m	Source
Base diesel vehicles and upgrades to electric	3.7	Existing revenue budget for Supported Services
Infrastructure upgrades and project management including contingency	5.0	WMCA Investment Programme
Total	8.7	

- 3.11 The Department for Transport grant conditions state that WMCA will be required to fund any additional costs of the scheme over those outlined above. There is also a risk that WMCA as the accountable body may be obligated to return DfT grant where the outputs have not been delivered. These financial risks and mitigations are detailed in the following table.

Risk	Details / Mitigation
As WMCA are the accountable body for the grant, there may be a risk that DfT claw back some / all the £50m in the event of non-delivery of outputs.	WMCA to secure delivery through use of legal agreements with 3 rd party delivery organisations. There will also be an Enhanced Partnership Scheme developed for Coventry which will require the operation of electric vehicles in the city, thus mitigating the risk that operators will run alternative diesel services. WMCA intend to work in close collaboration with DfT.
Risk of WMCA exposure to cost escalation (vehicles)	Agreements with Operators will be to a capped financial value, negating exposure to WMCA. The DfT funding would only be passed on to operators upon signing legal agreements ensuring compliance with the WMCA grant conditions.
Operators do not deliver the intended outputs for the grant provided	The legal agreements will ensure payments to operators are appropriately aligned to delivery.
Exposure to cost escalation (other works)	WMCA may be exposed to cost escalations with respect to the works it commissions directly (i.e. pantograph charging infrastructure etc.) but adequate contingency allowances are included within the budget.
Risk to not being able to achieve the full match funding requirement	Such a scenario may only occur where there is a lack of Operator interest. Letters of intent have however been received and Operators remain supportive.
Contravention of state aid regulations	The delivery route assessment took into account all State Aid implications in arriving at the chosen delivery option which is not considered to be exposed to State Aid implications.
Investment Programme funding does not realise the intended benefits.	The main benefit of the Investment Programme funding will come from unlocking the Government and Private Sector investment. The measures detailed above demonstrate how WMCA intend to hold the operator to account for delivery which thereby ensures the availability of the supplementary funding.
Operator liquidation during project	WMCA are working with Government to ensure the necessary financial support to the sector. Financial stability assessments will be carried out for operators taking part in the scheme as part of WMCA's standard procurement procedures. Also, part of the ongoing development of the grant conditions will ensure WMCA retains rights over assets as appropriate.

4. Legal Implications

- 4.1 Appropriate legal comments are set out in the accompanying Coventry Electric Bus City Full Business Case, as referred to within paragraph 9 (Schedule of background papers) of this report. Notwithstanding this, legal will assist as necessary in order to facilitate and progress the requirements of approvals arising in line with the recommendations of this report.

5. Equalities Implications

- 5.1 Equalities Impact Assessment has been undertaken by the project which identify and address key equality issues and their mitigating measures. This project provides a positive impact on young people, minority ethnic groups, disabled people and other protected groups, as well as lower socio-economic groups, who are more likely to rely on the bus network to access education, employment and other opportunities.

6. Inclusive Growth Implications

- 6.1 Economic Growth – the investment in new vehicles and associated charging infrastructure will provide an opportunity for local supply chains to support the manufacturing of new buses and infrastructure. In addition, the investment in local bus services will support local economic growth and provide better access for businesses to the labour market, playing a role in the economic growth of Coventry and the neighbouring areas of Warwickshire.
- 6.2 Transport – new buses will improve the local bus offer by creating an attractive, cleaner and greener public transport system operating within Coventry and for bus services between Coventry and Solihull, Birmingham, Warwickshire, Worcestershire and Leicester.
- 6.3 Infrastructure – the project will deliver associated charging infrastructure for local bus depots and where required, on-route charging infrastructure for buses.
- 6.4 Accessibility – making Coventry, along with neighbouring areas of Warwickshire, more accessible for business, visitors and local people through the provision of improved bus services using zero-emission, modern and accessible vehicles.
- 6.5 Health & Wellbeing – Poor air quality contributes to climate change and directly impacts upon human health, causing respiratory disease. The transition to electric buses will improve air quality, and therefore the health and wellbeing of local people.
- 6.6 Employment & Skills – the investment in new buses and associated charging infrastructure will bring opportunities to improve skills levels and qualifications to access jobs – Ignite (children and young people) / Retune (employability) / Accelerate (Skills for the future labour market).
- 6.7 Environmental Impact – Electric buses have noticeable environmental benefits over diesel buses in the form of fewer greenhouse gas emissions, even when taking into consideration the electricity generated to operate and charge the buses.

7. Geographical Area of Report's Implications

- 7.1 The project will see every local public bus service in Coventry operating with zero-emission electric vehicles over the next four years. Many of these local bus services also serve areas in Solihull, Birmingham and Warwickshire, as well as services to Evesham in Worcestershire and Leicester city centre. The learning from this project will help contribute towards the successful future roll-out of zero-emission buses within the wider conurbation and help demonstrate the capabilities of our region to effectively invest government funds, making the case for further funding for future schemes.

8. Other implications

- 8.1 None.

9. Schedule of Background Papers

- 9.1 Coventry Electric Bus City FBC – Final – Private