



WMCA Board

Date	13 January 2023
Report title	Very Light Rail Regional Package Strategic Outline Business Case
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Report has been considered by	Investment Panel - 21 November 2022 Investment Board - 13 December 2022

The WMCA Board is recommended to:

1. Approve the Very Light Rail Regional Package (VLRRP) Strategic Outline Business Case (SOBC) at a total cost of £36.8m following the assurance work which has taken place, including endorsement of the case by Investment Board.
2. Approve that WMCA submit the Business Case to DfT (which is expected to result in DfT relaxing the retained status for this element of the programme).
3. Approve funding for draw-down within phase 1 of the business case delivery as follows (subject to the necessary DfT consents):
 - Costs totalling £8.988m for Coventry City Council (CCC), being the sum required to complete Phase One of the VLR project
 - Costs totalling £1.20m for Dudley Metropolitan Borough Council (DMBC)
 - Costs totalling £0.60m being the sum required to complete the initial works to be undertaken by TfWM
4. Endorse the financial conditions to apply to the capital grant as agreed between officers of the WMCA, Coventry City Council, Dudley Metropolitan Borough Council and Transport for West Midlands as set out in Appendix 1.

1. Purpose

- 1.1 Coventry faces several challenges such as poor air quality, areas of high deprivation, congestion, and a growing population. To address these issues, which are common in other small to medium size cities, it became clear that an attractive zero emission mass transit system capable of achieving significant modal shift would be required. However, traditional light rail is unaffordable for small to medium size cities like Coventry.
- 1.2 The Very Light Rail Regional Package (VLRRP) is critical to enable the UK to develop an economic growth strategy centred around Net Zero. It will deliver a new manufacturing sector, creating jobs and skills primarily in the West Midlands, which could extend to other areas of the UK. Whilst supporting UK plc, it will deliver a new mode of transport which will complement existing modes and enable small to medium sized cities to deliver a fully integrated and holistic approach to building a sustainable transport network.
- 1.3 In order to realise this potential Coventry City Council (CCC), Dudley Metropolitan Borough Council (DMBC) and Transport for West Midlands (TfWM) are seeking to deliver the VLRRP which requires £36.8m funding from the WMCA City Region Sustainable Transport Settlement (CRSTS) allocation for this project. This funding will support the completion of the Coventry Very Light Rail (CVLR) Research and Development (R&D) programme, equip the VLR National Innovation Centre (VLRNIC) in Dudley (to support the CVLR R&D programme and future programmes) and enable TfWM to carry out feasibility studies to assess the viability of CVLR to deliver extensions to current Midland Metro services.

2. Background

- 2.1 In July 2022, the Secretary of State for Transport confirmed approval of the WMCA CRSTS programme for 2022-27. This includes an allocation of £71.5 million for the Very Light Rail Regional Programme (VLRRP). This comprises of three specific elements:
 - Coventry Very Light Rail (CVLR) scheme promoted by Coventry City Council (CCC) (£54.5m)
 - Dudley Very Light Rail National Innovation Centre (VLRNIC) promoted by the Black Country Innovative Manufacturing Organisation (BCIMO) and Dudley Council (£12m)
 - Mass Transit Options Appraisal study which is to include an assessment of urban VLR promoted by Transport for West Midlands (TfWM) (£5m)
- 2.2 At the request of the Department for Transport (DfT.), the Strategic Outline Business Case (SOBC) includes all three elements of the Programme. However, future business cases will be submitted for each individual project. The appended SOBC requests approval for the initial drawdown of funding from the CRSTS allocation.
- 2.3 The three schemes within the business case complement each other:
 - CVLR is the pilot scheme, with Coventry leading the development of the VLR product and facilitating the construction of the first in-highway section of VLR track as the final demonstration of the proof of concept for the system.
 - VLRNIC is supporting the Very Light Rail R&D programme and providing test facilities for the system before the installation in a live highway.
 - TfWM are in the early stages of exploring the use of VLR technology for the additional route extensions for the Midland Metro.

2.4 The CVLR programme is requesting drawdown of £35.0m to:

- Progress the R&D phase of the vehicle and track and prove the installation cost savings are credible through the building of a real-world test/ demonstration route in the city centre.
- Investigate market potential through showcasing the benefits to the UK of a new fixed rail, zero emission urban mass transit product offering that has a lower whole life cost than current rail-based offerings and can be manufactured in the UK.
- Analyse and design a first route corridor to address key issues for Coventry with respect to mass transit, levelling up and air quality.
- Enable the compilation of evidence to support a Transport and Works Act Order submission for route 1, and an OBC to draw down the remaining funding allocation.

2.5 The VLRNIC programme is requesting drawdown of £1.2m to:

- Fund essential equipment to make the VLRNIC fully operational and able to support CVLR testing and the repairs of the West Midlands Metro CAF V2 Urbos tram fleet during 2023.
- Provide testing facilities to support Coventry City Council in the completion of offline R&D to establish that the CVLR system functions to specification.
- Further validation and clarification of this proposal and support development of the OBC for submission in 2023.

2.6 The Mass Transit Options Appraisal (TfWM) are requesting £0.6m to:

- Investigate the feasibility of the CVLR system compared to other transit forms on several key corridors, which will result in a prioritisation of one or two schemes to take forward to OBC.
- Investigate whether the CVLR track form can be used on the Midland Metro to reduce costs of maintenance and potential route extensions.
- Develop a route specific SOBC for the prioritised route (s) incorporating findings of the feasibility study.

2.7 Due to the scale of the investment, and the innovative nature of the project, the VLRRP has been retained by DfT for their assessment and final approval as part of the CRSTS settlement. A separate SOBC has been produced using DfT templates (but containing the same information as the appended SOBC which uses the WMCA template) and this will be submitted to the DfT for this purpose subject to WMCA Board approval.

2.8 As the VLRRP Programme is a retained scheme it is subject to the assurance processes of both the WMCA and the DfT. These assurance process have been twin tracked, and the DfT has had sight of, and commented upon, the SOBC appended to this report as well as the SOBC that is being prepared using the DfT's template. Regular meetings are being held with DfT and TfWM officials as part of the programme governance.

2.9 At the request of the DfT, the VLRRP has been submitted on a single SOBC to go through the initial phase of the assurance processes. Due to the elements of the VLRRP Programme being delivered independently and subject to project management and the governance structures of the organisation responsible for their delivery, these elements will move through the future stages of the assurance process as separate submissions. A Dependencies Analysis is appended to the WMCA SOBC document as part of

considerations around Key Risks, but programme and risk will be managed by the respective delivery organisation.

3. Financial Implications

3.1 The CRSTS Programme Level Business Case included an allocation of £71.5m for the VLR project which was expected to be distributed across three delivery bodies / sponsors (Coventry and Dudley Local Authorities and TfWM via WMCA). All allocations within the CRSTS programme are provisional and subject to the WMCA Single Assurance Framework and the subsequent approval to the budget via the delegated approval structures.

3.2 Very Light Rail is one of two schemes (together with Aldridge Station) in the CRSTS programme which DfT are treating as a retained scheme. This means that DfT will undertake their own assurance before confirming the funding can be made available for the scheme. Initial consent has, however, been obtained from DfT for £7.3m which relates to the expected 2022/23 costs.

3.3 The case presented to Board requests an in-principle funding allocation of £36.8m across the sponsors as follows:

Local Authority	CRSTS Programme Level Business Case (VLR Allocation)						This report requests approval for:
	22/23	23/24	24/25	25/26	26/27	Total Provisional Allocation	
Coventry	6.40	9.79	17.17	5.58	15.55	54.50	£35.0m in principle (authorised in gated stages) with £8.988m as per this report for Phase 1.
Dudley (BCIMO)	0.71	8.39	2.90	-	-	12.00	£1.2m to complete the initial works
WMCA (TfWM)	0.20	0.60	1.50	1.70	1.00	5.00	£0.6m to complete the initial works
Total	7.31	18.78	21.57	7.28	16.55	71.50	

3.4 As shown above, the most significant of the allocations is intended to be awarded to Coventry. Given the magnitude of the funding request, Investment Board agreed for the £35.0m to be released in four phases which can be delivered sequentially. Progression from one stage to the next would be subject to endorsement via WMCA Investment Board and based on an assessment of the latest scheme characteristics (expected out-turn, outputs, revised value for money metrics etc). It should be noted that WMCA Board would reserve the right to withhold funding in respect of expenditure on subsequent phases until it was adequately satisfied at these ‘gateway points’.

3.5 This report requests that £8.988m Phase 1 of 4 is approved for draw-down by Coventry, subject to DfT being content with the outcome of their assurance processes. The four phases are summarised below:

Phase of VLR development	Funding Requirement
Phase 1: vehicle testing and continued development, slab testing and development and City Demonstrator detailed design for construction	£8,987,777
Phase 2: preparation for construction of City Demonstrator including Traffic Management implementation to support an improved walking, cycling and public transport corridor within the city centre	£8,757,440
Phase 3: construction of phase 1 of City Demonstrator (circa 1km of twin track)	£11,440,474
Phase 4: completion of TWAO submission and completion of OBC compilation for the first route from rail station to University Hospital (based on evidence from City Demonstrator installation and operation)	£5,897,010
	£35,082,702

- 3.6 In addition, the report requests approval to draw down £1.2m and £0.6m of funds (again, subject to the necessary DfT consents) for Dudley MBC and WMCA respectively which will allow those sponsors to take the relevant tasks to the next stage in the WMCA Single Assurance Framework. These sums are in line with the CRSTS programme level business case agreed by WMCA Board.
- 3.7 The drawdown of funding will be in line with the standard processes, being quarterly in arrears and authorised by the relevant Section 151 Officer. Appendix 1 documents the specific conditions which were also provided to Investment Board.
- 3.8 It should be noted that the overall CRSTS programme included the requirement to identify c.15% of match programme funding from 'non-Central Government' sources. Coventry CC have confirmed the availability of £3.2m match funding, which is expected to be realised before the end of the CRSTS period, being 31 March 2027.

4. Legal Implications

- 4.1 The previous grant agreement from WMCA for investment in VLR has been expended and a completion report was issued to WMCA in September 2022. Coventry City Council will require a new grant agreement reflecting the outputs which are to be delivered with the terms and conditions to be agreed between the Council and WMCA. As this is a tri party application TfWM and DMBC will also require separate grant agreements reflecting the amount which is to be granted to each entity. The financial conditions of approval agreed between officers of WMCA, CCC, Dudley and TfWM are set out in Appendix 1.

5. Impact on Delivery of Strategic Transport Plan

- 5.1 Analysis of existing policy, plans, and strategies has demonstrated that the introduction of CVLR and VLRNIC will represent a strong strategic fit with objectives and delivery of the Strategic Transport Plan. This includes fulfilling objectives set out in local, regional, and national policies including reducing congestion, reducing climate and environmental impacts of travel, improving connectivity (and in turn the local economy) by supporting the generation of new industry and jobs in the West Midlands.

6. Equalities Implications

- 6.1 An Equalities Impact Assessment (EIA) for CVLR, was included in the SAF SOBC submission to Investment Board and is available upon request. This was produced by Coventry City Council in July 2022 and considers the impact on protected characteristic groups.
- 6.2 EIAs for TfWM and BCIMO elements of the package need to be undertaken but a high-level assessment of Equalities Implications has been provided to Investment Board and is available upon request.

7. Inclusive Growth Implications

- 7.1 The VLRRP intends to create opportunities for jobs and new manufacturing activity across the region whilst removing the current cost barrier that prevents medium sized local authorities from acquiring tram-based transport solutions. The CVLR project supports the inclusive growth objectives by providing connectivity between areas of high deprivation with areas of education, employment, health and retail, this programme will generate employment not only in the development, construction, and operational phases of the Coventry route but also by developing a market leading Very Light Rail product predominantly manufactured in the West Midlands which will generate employment opportunities throughout the supply chain. The development of the capabilities of the VLRNIC will enable the development of rail-based innovations including CVLR and provide training and support to the local supply chain across the rail-based transport sector. The application of these products into the route corridors of the west midlands will through the reduced cost and disruption, enable increased levels of mass transit connectivity throughout the region.
- 7.2 VLRRP supports the Government's Industrial Strategy, helping to tackle the "future of mobility" Grand Challenge, as well as supporting the objectives of the High Value Manufacturing Catapult in pursuing the design and manufacture of new high technology products and services in the UK to meet domestic needs and generate opportunities for exports. If the SOBC is not approved, then the growth outcomes detailed above are at risk.

8. Geographical Area of Report's Implications

- 8.1 While the VLRRP will directly benefit Coventry and Dudley – the 2 sites of the VLR development, the ripple effect created from the development of this unique technology will be felt throughout the West Midlands' region as other Councils take advantage of the economic and transport benefits outlined above. In particular, the VLRRP will provide a mass transit solution that could be implemented in communities across the West Midlands, an equipped VLRNIC to encourage and enable innovation and manufacture opportunities and mass transit feasibility studies (led by TfWM) which may demonstrate the case for CVLR in delivering light rail service extensions that could not be otherwise affordable to deliver.

9. Other Implications

9.1 The VLRRP will deliver several qualitative benefits as detailed in the SOBC (a summary is available upon request). If the SOBC is not approved, the benefits are at risk and an affordable VLR system will not be available for small/ medium size cities and towns such as Coventry.

10. Schedule of Background Papers

10.1 Appendix 1 VLRRP Financial Conditions (confidential appendix)

Available upon request.

- SAF Business Case Maturity Assessment
- SAF Risk and Investment Report
- VLRRP Equalities Implication