

## WMCA Board

<b>Date</b>	17 March 2023
<b>Report title</b>	Full Business Case Approval for Spend Under City Region Sustainable Transport Settlement Metro Line 1 Renewals
<b>Portfolio Lead</b>	Transport - Councillor Ian Ward
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<b>Report has been considered by</b>	Programme Assurance and Appraisal Team Investment Panel TfWM Leadership STOG Investment Board SLT Transport Delivery Committee

### Recommendation(s) for endorsing:

#### Board is recommended to:

- (1) Approve the Full Business Case submission from the City Region Transport Settlement Scheme (CRSTS) as endorsed and agreed by Investment Board in December 2022 and note the full funding cost of £27.85m which brings the programme total to £30m.
- (2) Approve an initial draw down of funding of £8.381m against the Full Business Case in addition to the £2.15m approved at the investment board in November 2022.

- (3) Note that this incremental approval approach is designed to balance the need to cap overall spending (in advance of the report to June 2023 WMCA Board looking holistically at Transport Capital Pressures) with the urgent nature of the works.
- (4) Note that subject to a decision at the June 2023 WMCA Board with respect to the overall transport pressures, a gated approval mechanism for future approvals may be recommended for this programme based on annual requirements.
- (5) Delegate the authorisation to the Executive Director of Transport for West Midlands in consultation with the WMCA Section 151 Officer, to award contracts to the successful tenderers for each package subject to:
  - i. The contract being within the approved budget;
  - ii. All funding agreements being signed and sealed to the satisfaction of the WMCA Section 151 Officer and the Managing Director TfWM;
- (6) Accept the Appraisal Recommendations as detailed in Section 6

## **1. Purpose**

Ongoing investment in the existing Metro infrastructure is unavoidably required to keep the network safe, reliable, and operational.

## **2. Background**

- 2.1 West Midlands Metro is a core part of the TfWM network, and wholly owned by WMCA. During the pandemic it provided continuous service to key workers in the region. It offers essential and reliable transportation options to a large part of our demographic that does not have access to a car, and directly connects the Black Country and the centre of Birmingham.
- 2.2 The line currently carries c.685,000 passengers per month, and we have seen during the pandemic the significant problems caused to residents and key workers if the service is suspended.
- 2.3 It represents a key and sustainable transport solution in line with our objectives for sustainable and reliable public transport.
- 2.4 The Line 1 infrastructure is over 20 years old and has had little significant replacement of equipment over this time. When the Operation and Maintenance was brought in house at the end of the former operator concession it was clear that the system was in a poor state of repair. We have had an increasing number of failures of the existing equipment including failures of the Overhead Line Equipment which cause a closure of the whole line. These failures have increased significantly in the past 3 years. Similarly, the track is in need of repairs or replacement with several sections at the limits of their maintenance tolerance and so close to safety tolerances. If we reach safety tolerances the line would be suspended while repairs are carried out. This planned programme of works would allow the repairs/renewals to be carried out in a controlled way without significant impact on the travelling public. A programme of Overhead Line Equipment (OLE) repairs and

track replacement was started under previous funding, attending to the most urgent sections first.

- 2.5 Between Wednesbury and Bull Street in Birmingham this infrastructure will form the core, central section of the expanded network as the new extensions are brought into service. Trams from Dudley, Wolverhampton, Edgbaston and Digbeth will all run through the central section of Line 1. If this section fails, not only would the current system be suspended, but also the whole network expansion programme would be unable to deliver the outcomes anticipated.
- 2.6 Therefore, a programme of renewals of key infrastructure (OLE, track, and other obsolete or life-expired equipment) needed over the next 5 years was developed with the Operator (MML) team. This is the most urgent list of renewals of a 30-year plan. TfWM were asked to include with this, the annual repair works that would be anticipated for the next 5-year period. These costs have averaged £3m per year in the previous periods. The whole package was estimated in 2021 at approx. £65m. In discussions over the CRSTS funding, an initial £30m of the £65m scope was included in the approved CRSTS programme for the most urgent of these works, and the scope of works prioritised accordingly. Although the remainder of the original list of works does still need to be delivered, this reduced scope will have the greatest immediate impact on the risk of system failures over the coming few years.
- 2.7 An initial urgent package of work to a value of £2.1m has already been approved by Investment Board on 17th October 2022. This covered advanced and safety critical work, in anticipation of this FBC, and is included in the summary of works to be delivered.

### **3. Strategic Aims and Objectives:**

- 3.1 This business case seeks investment in the Midland Metro infrastructure. The identified works from the Metro Renewals Programme is required to mitigate the risk of exceeding maintenance and safety limits, to continue the current metro service and to avoid any further disruption for passengers and includes the items listed in 4 below.
- 3.2 These works will assure the continued operation of the Line 1 service to regional passengers. This supports our objectives of connecting people across the region to work, education and leisure activities and promotes regional growth. It also ensures that as the extensions are opened, they will be able to deliver the announced outcomes in their respective business cases.
- 3.3 By carrying out these works in a timely manner we meet our obligations as Owner of the infrastructure to maintain a safe and sustainable operating infrastructure.
- 3.4 This FBC contributes towards Inclusive Growth within the West Midlands and contributes towards #WM2041 net zero emissions.

## 4. Financial Implications:

4.1 The cost estimate for the FBC Metro Renewals works is £27.85m and the anticipated spend profile over the CRSTS period is:

Item	Unit	2022/23	2023/24	2024/25	2025/26	2026/27	Total
<b>Costs</b>							
Renewals	£'000	(1,989)	(3,429)	(2,872)	(1,762)	0	(10,052)
Life Cycle	£'000	(2,536)	(2,993)	(2,088)	(2,438)	0	(10,055)
Additional costs	£'000	(284)	(1,006)	(1,500)	(858)	0	(3,648)
Risk & Contingency	£'000	(568)	(1,224)	(1,292)	(1,012)	0	(4,095)
<b>Total</b>	<b>£'000</b>	<b>(5,376)</b>	<b>(8,651)</b>	<b>(7,753)</b>	<b>(6,070)</b>	<b>0</b>	<b>(27,850)</b>
<b>Funding</b>							
Match funding	£'000	-	-	-	-	-	-
Private match	£'000	-	-	-	-	-	-
CRSTS Funding Requirement	£'000	(5,376)	(8,651)	(7,753)	(6,070)	0	(27,850)
<b>Total</b>	<b>£'000</b>	<b>(5,376)</b>	<b>(8,651)</b>	<b>(7,753)</b>	<b>(6,070)</b>	<b>0</b>	<b>(27,850)</b>

The BJC for Urgent Line One Renewals was previously approved to a sum of £2.15m, bringing the overall total CRSTS funding for Line One Renewals to £30m.

4.1 The remaining £27.85m being requested through this Business Case includes provision for:

- Replacement of sections of rail
- Replacement of sections of Overhead Line
- Tamping of ballast
- Hill Top Tunnel lining
- Tram bogie overhauls
- Provision for tram battery replacement
- Improvements to Passenger Assistance Unit on tram in advance of BBYB
- Overdue maintenance to steel structures

4.2 The figures are inclusive of inflation increases, based on the BCIS TPI forecast and the timescales advised by MML for delivering the works.

4.3 A risk allowance of £4.1m is included, which equates to approximately 17% of the estimate. This figure represents the P80 of the risk analysis, (QCRA), quantitative impact analysis from our risk management tool, ARM.

4.4 Although this contingency should be sufficient to cover this risk, if market forces mean that we cannot deliver the full list of activities within the £30m funding, we have identified items which would have less impact on reliability or safety and / or can be delayed until future funding is identified, to enable us to keep within the agreed funding profile, (eg painting of steel structures).

4.5 The priority ranking of the scheme may be affected by emergency repairs, discovery, inflation and market factors, timing, changes in cost or contractual changes, etc. Therefore, it is essential that schemes outside of this list of essential works, which are included in the full programme of works can be reprioritised and funded using this allocation if required.

## **Funding**

- 4.6 A funding allowance of £30m for these works have been included within the overall CRSTS package awarded to WMCA of which £2.15m has been previously approved. Approval of this £27.85m will increase the approved budget to £30m for the renewals works.
- 4.7 Pending the overall metro programme financial review (anticipated in June 2023), and in view of this being a large value programme of small delivery projects, it has been agreed that there will be a Financial Gateway applied upon the approval of this package. In addition, Investment Board requested a further report be submitted to the board in 12 months' time setting out the progress made in delivering these renewal works. As such, it is recommended, if necessary, the financial gateway arrangements are dealt with by Investment Board subject to the outcomes of the June 2023 report with respect to the overall capital pressures.
- 4.9 The release of immediate funding to the Project team will be limited to the value of the delivery/commitment of the first and most urgent scope required to ensure safe operation and / or best financial value and affordability of the overall programme – i.e. £8.38m of works. This reduced scope has been defined by the TfWM team together with the Operator team as the minimum required to assure a reliable service. These works are focussed largely on Overhead Line renewals and tram bogie renewals.
- 4.10 Subject to the inclusion of the programme budget within CRSTS, the Project Team would need to provide adequate confidence to the Investment Board in the annual report that there is meaningful progress in this first stage of delivery scope and preparations for the next packages are firmly costed and prioritised before further funding for the remainder of the scope can be accessed.

## **5. Legal Implications**

- 5.1 There are no direct legal implications arising in regard to the endorsement for approval set out in (1) (see above) of this report, nor indeed in regard to the contents of this report. Legal support is being provided by the WMCA regarding the deliverables arising in regard to the FBC.
- 5.2 The deliverables include any legal contracts required for this scheme including the funding provisions where WMCA Legal Services will provide the necessary support and input in respect of any drafting.

## **6. Impact on Delivery of Strategic Transport Plan**

- 6.1 The Metro service is an integral part of the Strategic Transport Plan, and as such, risking the failure of key equipment on the line by not carrying out these renewals would adversely impact the Strategic Plan.

## **7. Single Assurance Framework Implications**

- 7.1 The FBC has been reviewed by the Programme Assurance and Appraisal (PAA) team.

WMCA appraisal notes that this project is essential to the continued safe operation of the Metro network but considers that there are several weaknesses in the existing FBC. These weaknesses do not relate directly to value of the project and the work involved, but instead relate to good project management and ensuring full accountability of the outputs and benefits to be obtained for this expenditure. This is being strengthened within the improvements that are being made within the delivery team previously referenced to the Board.

7.2 Investment Board was recommended to:

- Note the importance of this work to the continuing operation of Metro Line 1, and approve this business case on this basis
- Request the Metro project team to continue to work with wider TfWM and WMCA Finance & Business Hub colleagues to understand the weaknesses in this business case and develop a strategy to improve future business cases
- Request a quarterly monitoring report from Metro of the progress against the packages.

## **8. Equalities Implications**

8.1 There are no equalities implications other than the risk of not providing a tram service if these works are not delivered in a timely manner.

## **9. Inclusive Growth Implications**

9.1 Considering the eight fundamentals of inclusive growth across the Inclusive Growth Framework, the implications of the investments into the line 1 infrastructure are as follows:

### **9.2 Climate resilience:**

Ostensibly, investments that enable new public transport provision are a positive development, although the challenge with Metro is its carbon intensive construction, with a modal shift that tends to be from other public transport modes, rather than cars. The works included here are less carbon intensive as they are focused largely on rail and Overhead Line Equipment.

### **9.3 Connected communities:**

The implications are substantial for this fundamental, as Metro creates faster connections between places on the new lines, as well as opportunities for helpful clustering of resources, amenities, and other connections around the stations.

### **9.4 Inclusive Economy**

- For people who need to travel for work, the enhanced connectivity provided by the new Metro lines will enable them to have more potential employment opportunities, as they can travel to more locations within a reasonable commuting duration.
- The level access of Metro as a travel mode makes it easier for people with mobility aids to travel further, so could create more employment opportunities for people with disabilities relating to mobility.
- Economic growth around Metro stations is a desired outcome of the investment, and a place and population-led approach to this should be taken. TfWM have other levers

that they can use to precipitate these outcomes – for example, by introducing Mobility Hubs.

**10. Geographical Area of Report's Implications**

The positive impact of what is delivered will be for the existing full Metro network and neighbouring districts.

**11. Other Implications**

N/A

**12. Schedule of Background Papers**

Full Business Case (FBC)  
Risk & Investment Appraisal