



WMCA Board

Date	24 May 2019
Report title	Regional Transport Coordination Centre - Full Business Case Approval
Portfolio Lead	TBC
Accountable Chief Executive	Deborah Cadman, West Midlands Combined Authority email: deborah.cadman@wmca.org.uk tel: (0121) 214 7552
Accountable Employee	Laura Shoaf, Managing Director, Transport for West Midlands email: laura.shoaf@tfwm.org.uk tel: (0121) 214 7444
Report has been considered by	Strategic Transport Officers Group - 13 May 2019 TFWM Leadership Team - 29 April 2019 Senior Leadership Team - 1 May 2019 Programme Board - 10 May 2019

Recommendation(s) for action or decision:

The WMCA Board is recommended to:

- (1) Approve the full business case (FBC) for the delivery of the Regional Transport Coordination Centre (RTCC);
- (2) Confirm the allocation of up to £19.5m from the Transforming Cities Fund (TCF) comprised of £1.5m agreed at the WMCA Board meeting in November 2018 and an indicative £18.0m allocated in March 2019 to enable delivery;
- (3) Note that the intention for the revenue costs for the core team and operation of the RTCC is to absorb these costs within existing WMCA resource levels; and

- (4) Agree that the delivery of highways investments for each local authority will be subject to grants being provided from the TCF fund which will be determined and governed by the WMCA/TfWM and approved by each local authority's formal approval processes. This will seek to present opportunities for revenue savings to be examined with each Local Authority to ensure that they are manageable within Local Authority budgets.

1. Purpose

The purpose of this report is to approve the full business case for the delivery of the Regional Transport Coordination Centre (RTCC) which is a multi-agency facility to assist with:

- The coordination of the transport network during the delivery of the transport investment programme and other major events within the region and
- The ability to communicate disruptions to residents, business and visitors to the region ahead of and during works, events, and incidents to keep the region moving.

2. Background

2.1 In 2017 the WMCA Board considered a strategic outline case for the need to manage investments in the transport system that, whilst delivering much needed improvements and capacity, would result in an extended period of disruption during their concurrent delivery. These investments include:

- The delivery of HS2;
- Improvements to the motorway network;
- Enhancements in rail through franchise agreements, new and improved stations and infrastructure;
- Projects being delivered by TfWM to
 - triple the tram network;
 - The introduction of new bus rapid transit (Sprint) corridors; and
- With local authorities improvements to the performance, safety and efficiency of the Key Route Network (KRN).

2.2 Leaving these improvements unmanaged, it was acknowledged that this would be harmful to the existing economic performance of the region with extended temporary reductions in capacity on the existing transport system over the next 5-10 years. In order to mitigate this impact, the WMCA Board agreed the need to investigate the introduction of an RTCC to assist with the management of the delivery programme with the aim of reducing disruption across the region from these works and significantly improving communications to the public.

2.3 As part of the WMCA Devolution Agreement with the government, funding was provided by the DfT to develop a full business case and this has been overseen by a Steering Group made up from representatives from the local authorities, the DfT, West Midlands Police and Highways England, with Network Rail and rail and bus operators more recently participating.

2.4 In September 2018 the WMCA Board approved its Congestion Management Plan (the Plan), which proposed three programmes of work: improving capacity, improving efficiency and managing demand on the transport system. Under the theme of efficient management of the transport system, the Plan proposed the preferred option for delivering the RTCC as recommended by the Steering Group. The functional scope of the preferred option is outlined in Appendix 1. The objectives and benefits of the RTCC are set out in the FBC in Appendix 3.

- 2.5 Collectively the RTCC will enable cross boundary and multi-modal coordination of the management of the transport system minimising impacts of disruptions during work. It also includes keeping the users informed and thereby enabling them to plan journeys, avoid delays and keep moving. The overarching objective is to support the West Midlands economy during these major investments, ensuring that residents can continue to access employment, education and training, particularly those with limited transport options, as well as keeping businesses connected to their labour and trade markets and supply chains.
- 2.6 In March 2019 the WMCA Board identified up to £18m of the Transforming Cities Fund (TCF – Round 2) in addition to £1.5m of TCF (Round 1) already allocated. An additional £2m has been made available through Midlands Connect. This funding will enable the delivery of the RTCC to meet its objectives and invest in the operation of the transport system as well as provide coordinating resources working at a regional level.
- 2.7 Each existing control centre operated by local authorities, Highways England and transport operators will continue to provide its existing function utilising current funding arrangements. Following an assessment ratified by the Steering Group, a coordination team will be based at 16 Summer Lane with connectivity to all control centres to work across the partnership. This coordination centre will enable information flows from each of the locally based control centres. For example, Highways England's regional control centre will have visibility of the local traffic networks and each of the local authority traffic control centres will have visibility of the motorway network. This will enable the added value of the RTCC's coordination role in line with the agreed functional scope and objectives, bringing together partners through information sharing and a common approach to disruptions communication enabling efficiencies for the benefit of residents, businesses and visitors using the transport system.
- 2.8 The delivery of the RTCC will bring together programme and performance data of the transport system into a single view available to all of the partners at all control centres.
- 2.9 This will provide the ability to review programmes of work both in terms of their location and indicative delivery dates of planned works. This greater visibility will aid coordination of delivery programmes helping to reduce conflict of scheme delivery, programme clashes with traffic diversion routes and where these cannot be avoided, develop joint mitigation plans and communications about delivery. It will also enable more immediate roadworks from roadworks.org to be included and future available information from the DfT's Street Manager project as it progresses. It will provide a short, medium and long term view of the planned disruptions to the network and enable better regional management and coordination.
- 2.10 The RTCC will provide a real time view of the performance of the whole of the transport system, including the road network. By understanding the performance, alerts and standard reports will aid operators in developing mitigation strategies both locally and at a regional level. It will also aid with managing incidents on the network more efficiently.

- 2.11 Through improved customer information channels (web and digital), the RTCC will provide consistent and timely travel information for all modes that is 'one version of the truth' to residents, businesses and visitors to help them avoid disruption, manage demand and signpost them to alternative, more sustainable journeys. Recent surveys undertaken by TfWM as part of the development of its Congestion Management Plan have identified that 58% of people are unhappy with the information they receive about road works and disruptions to their journeys. The RTCC is seeking to address this by significantly improving how we communicate with the public and helping them to avoid or plan around disruptions.
- 2.12 As part of the delivery of the RTCC, there will be a programme of highways interventions which will upgrade existing traffic signal technologies or introduce new traffic management and monitoring assets such as CCTV. This part of the programme will be delivered over a three year period and will ensure that the investments fit into the priorities for the network management duty of each local authority and the requirements of the Congestion management Plan. These investments will be agreed at a local authority level and any revenue requirements for the management of new assets will need to be considered. This however does present an opportunity to introduce new energy efficient technologies e.g. LED signals, which could have a revenue saving for the authority in terms of their ongoing management. TfWM will work very closely with each authority to define the delivery programme and manage resources.
- 2.13 The RTCC will be the cornerstone for transport operations during the major events that the region will be hosting, including the City of Culture in Coventry in 2021 and the Commonwealth Games in 2022.
- 2.14 The RTCC also provides a foundation for trialling innovation projects. This includes 5g technologies that can be deployed across the network enabling greater connectivity from on street and other transport systems to the local and regional control centres. This in the long run could assist with reduced costs for this connectivity. The RTCC will enable trials to take place with this new emerging technology to test outcomes and upscale where proven. In addition, the RTCC will also support other innovation projects, including CAV, through monitoring on street assets and digitisation of the real world conditions supporting the test beds that are being extended within the West Midlands and the regions advanced manufacturing Industry. It will also assist with supporting customer facing innovation projects including demand responsive services and other future mobility solutions.
- 2.15 In addition to this, , throughout the development of the RTCC, concerns have been expressed by transport professionals about the need to address a skills shortage, future workforce planning needs and the impact of new and emerging technologies on current capabilities. The RTCC will therefore also act as a platform for the development of a skills academy around wider transport areas from traffic signal engineers, to transport planners. Working with the WMCA Skills team and our supply chain where there are partnering opportunities, a programme is being created to invest in the existing workforce and develop apprenticeship opportunities with further education providers making best use of the apprenticeship levy where applicable.
- 2.16 The RTCC offers a benefit cost ratio of 7:1 and will continue to offer further benefits for trialling innovation projects. Phase 1 will be operational from December 2019. During 2020 and 2021, the RTCC will continue to refine its processes, data sources and intelligence of the transport system as it goes through testing and maturity of operations. The high level delivery plan is set out in Appendix 2.

3. Financial Implications

3.1 The following table gives an overall summary of the estimated capital implementation and annual revenue costs for the RTCC based upon the detailed business case work that has taken place to date.

		2019/20	2020/21	2021/22	2022/23	Total
		£	£	£	£	£
Estimated Capital Implementation Costs		5,288,854	4,317,942	4,145,060	3,029,701	16,781,557
Capital costs contingency	25%	1,322,214	1,079,485	1,036,265	757,425	4,195,389
Capital Implementation Costs (including contingency)		6,611,068	5,397,427	5,181,325	3,787,126	20,976,946
<i>Funded by:</i>						
						Total Funding
RTCC Transforming Cities (1)		1,500,000				1,500,000
RTCC Transforming Cities (2)		4,836,068	3,622,427	5,181,325	3,787,126	17,426,946
Midlands Connect (DfT) allocation		275,000	1,775,000			2,050,000
		6,611,068	5,397,427	5,181,325	3,787,126	20,976,946
Overall capital funding envelope available 21,550,000						
Note: Midlands Connect (DfT) allocation assumes it is to be used to fund signals/roadside equipment						Remaining uncommitted capital funding available 573,054

	2019/20	2020/21	2021/22	2022/23	Total
	£	£	£	£	£
Estimated Revenue Operational Costs	248,447	718,269	937,240	959,732	2,863,688
Revenue costs contingency (15%)	37,267	107,740	140,586	143,960	429,553
Revenue Operational Costs (inc contingency)	285,714	826,009	1,077,826	1,103,692	3,293,241
<i>Funded by:</i>					
Transport Delivery Revenue budget (Levy)	285,714				285,714
Additional Revenue Requirements		826,009	1,077,826	1,103,692	3,007,527

3.2 The estimated capital implementation costs are affordable within the overall capital funding available. A funding profile has already been agreed with the DfT over the next four years. Within the funding agreement, the first call on Grant draw down has been prioritised to the Wednesbury Brierley Hill Metro Extension, to the amount of £207m. The funding agreed within the TCF2 Congestion Management Plan (£18m) will not be available until the start of 22/23. As a consequence, the majority of the costs will be incurred in advance of funding received, which may require cash-flowing. To partially mitigate this financial risk, a prioritisation review is underway with Project Managers, to confirm delivery plans and cash-flow requirements.

3.3 In terms of the estimated revenue costs of operating the RTCC, the 2019/20 revenue costs are contained within budgeted funding within the overall 2019/20 Transport Delivery Revenue budget.

- 3.4 It should be noted that options for funding for the estimated revenue costs beyond 2020/21 are currently being assessed and will provide the basis of a clear and realistic funding strategy to contain those costs within existing WMCA resources. This strategy will need to be integrated into the TfWM Medium Term Financial Plan which will consolidate the financial pressures and priorities of the WMCA for onward consideration by Local Authorities in their financial planning cycles. The funding strategy will take account of any commercial opportunities to contribute towards and / or negate the impact against the Transport Levy. As part of the programme a commercialisation workstream will be reviewing all other options around alternative income sources that can offset the revenue consequences including hiring of the facilities for managing major events, consolidation of commercial contracts for on street equipment's e.g. CCTV, sponsorship of customer facing tools, introducing fees and charges for services to third parties etc. The strategy will be and overseen and agreed by the TfWM Board.
- 3.5 As part of the wider agreement with the government, the Combined Authority (or other decision making authority) must have arrangements in place to ensure that where funding is allocated there are local systems in place to ensure that resources are spent with regularity, propriety and with value for money in mind. These arrangements should also endorse that projects are viable and support the aspirations of the Strategic Economic Plan. The RTCC project presents a unique set of circumstances and an opportunity for a new approach in assuring the project as it progresses. It is the intention that the project team continue to work alongside the WMCA's assurance function to monitor and support implementation following sign off of the FBC.

4. Legal Implications

- 4.1 As a multi-agency multi-modal collaboration, there will be a need to put in place appropriate data sharing and information management systems to provide safe and secure transfer as well as the completion of relevant memoranda of understanding to set out agreed roles and responsibilities. These will be confirmed and put in place during the delivery of the RTCC and ahead of go live.
- 4.2 The current control centre adheres to BS7958 standard; the RTCC will also be evaluated to that or alternative appropriate industry standards.
- 4.3 During the detailed design stage, it is envisaged that personal data is likely to be processed by the RTCC; a Data Privacy Impact Assessment (DPIA) will be undertaken to ensure compliance with the General Data Protection Regulation (GDPR) and address privacy risks.
- 4.4 Each Highway Authority will be responsible for the delivery of investments and agreeing the detailed design. Legal agreements will need to be put in place to capture the funding and specification requirements for each authority.
- 4.5 It is acknowledged by the Project Steering Group that the implementation phase 1 will be subject to public procurement regulations. The team have been working closely with the WMCA legal and procurement colleagues to prepare a range of procurement plans/processes during the implementation phase of the Project.
- 4.6 A risk register has been developed covering the operational risks of the project. These risks are reviewed and updated weekly.

5. Equalities Implications

- 5.1 There are no direct impacts on equalities as a result of the delivery of the RTCC. It will however ensure that through trusted and consistent information and the coordination of road works, that residents with limited transport choices and with no access to a car will be able to access public transport options for work and leisure journeys.

6. Inclusive Growth Implications

- 6.1 By ensuring networks are kept moving and travel choices are communicated in a consistent, reliable and understandable format, we will enable people with limited travel choices to access public transport to make commuter and leisure journeys and to access opportunities in employment from the region's growth, education and leisure facilities.

7. Geographical Area of Report's Implications

- 7.1 This report covers the whole region bringing together TfWM, all local authorities, Highways England, Network Rail, and tram, bus and rail operators to coordinate and manage the transport system along with the ability to communicate effectively about travel disruptions to residents, businesses and visitors.

8. Other Implications

- 8.1 No other implications have been identified.

9. Schedule of Background Papers

- WMCA Board report 17 February 2017 - Network Resilience – Preliminary report
- Strategic Outline business case dated - 24 July 2018
- WMCA Board report 14 September 2018 – Congestion Management Plan
- Full Business Case – Appendix 3 of this report.

Appendix 1

Criteria	Preferred option RTCC Roles and Responsibilities
Functional Scope	<ul style="list-style-type: none"> • Management of people and business movements: <ul style="list-style-type: none"> - Surface operations - private car, delivery/freight, bus and Sprint (bus rapid transit) - Pedestrians and cyclists
	<ul style="list-style-type: none"> • Contingency planning in response to region-wide incidents: <ul style="list-style-type: none"> - Informed by intelligence-led scenario planning and simulated decision support
	<ul style="list-style-type: none"> • Management of people and business movements: <ul style="list-style-type: none"> - Surface operations - rail and tram - “Street” activities
	<ul style="list-style-type: none"> • Safety and security: <ul style="list-style-type: none"> - Support for Police coordination of events - Support for the Local Resilience Forum
	<ul style="list-style-type: none"> • Safety and security: <ul style="list-style-type: none"> - Monitoring crime and anti-social behaviour at transport facilities/routes
Capability	<ul style="list-style-type: none"> • Roadworks coordination • Common operating picture • Output to “Travel Information Service”
	<ul style="list-style-type: none"> • Incident planning • Incident coordination • Network monitoring and reporting • Major event transport planning
	<ul style="list-style-type: none"> • Major event transport coordination and management
	<ul style="list-style-type: none"> • Incident management and control (e.g. Gold and/or Silver governance structure)
	<ul style="list-style-type: none"> • As-needed management of all transport networks and services
	<ul style="list-style-type: none"> • 24/7 operational capability
Hours of Operation	<ul style="list-style-type: none"> • 24/7 operational capability
Geography	<ul style="list-style-type: none"> • All roads within WMCA region
	<ul style="list-style-type: none"> • All modes within WMCA region
Physical Space	<ul style="list-style-type: none"> • Expanding/reconfiguring space in existing centre
Permanency	<ul style="list-style-type: none"> • Permanent capability fully equipped to expand
Organisation	<ul style="list-style-type: none"> • Seven local authorities • Highways England • WMCA/TfWM
	<ul style="list-style-type: none"> • Police • Warwickshire and surrounding Shire Counties
	<ul style="list-style-type: none"> • Multi-agency response teams
	<ul style="list-style-type: none"> • Public transport service operators • Other service providers, e.g. Inrix
	<ul style="list-style-type: none"> • Existing personnel in current roles
Resourcing	<ul style="list-style-type: none"> • Existing personnel in current roles
	<ul style="list-style-type: none"> • Core Coordination Team
	<ul style="list-style-type: none"> • 24/7 operational capability

Appendix 2 – High Level Delivery Plan

