

Full Business Case			
1. General Information			
Directorate	Economy	Portfolio/ Committee	Transport and Environment Finance and Resources
Project Title	Westside Metro Extension and Associated Measures	Project Code	CA-02703-08
Project Description	<p><u>Summary</u></p> <p>This Full Business Case (FBC) relates to the Westside Metro Extension from Stephenson Street to 54 Hagley Road and the set of Associated Measures required to support the delivery of the required outcomes.</p> <p>The Associated Measures consist of Complementary Highway Works (CHW) as detailed within Appendix C and enforcement camera implementation and ongoing enforcement operations.</p> <p>The CHW will provide bus priority advantages to help maintain bus service resilience, encourage modal shift, facilitate road closures and reduce the impact of the works.</p> <p>Camera enforcement is required to prevent/discourage general traffic from using the bus/tram lanes, which disrupts services and reduces journey time reliability. Providing more reliable/‘attractive’ public transport options is crucial to encouraging modal shift from private vehicles. The proposed camera locations are listed in Appendix D, with the cameras to be delivered in phases to suit the construction programme.</p> <p>The West Midlands Combined Authority (WMCA)/Transport for West Midlands (TfWM), have responsibility for delivery and funding of the implementation of the Metro Westside Extension capital scheme, including Associated Measures, at a total estimated capital cost of £149.200m, with the Council approving proposals in its the capacity as the Highway Authority. The implementation works are being led by Midland Metro Alliance (MMA) on behalf of the WMCA and TfWM.</p> <p>Following implementation of the scheme the Council will take ownership of the enforcement cameras provided by WMCA/TfWM as Highway Authority assets and responsibility for the ongoing operation of the enforcement activity and the operational income and expenditure including future maintenance obligations. The Council will also be responsible for on-going maintenance liabilities arising from additional highway assets, anticipated to be funded by WMCA/TfWM through a commuted sum. The split of asset maintenance responsibilities between the Council and WMCA has been indicatively identified on a typical highway cross-section in Appendix H.</p> <p>The proposed strategy is for delivery of these works, so that the tram is operational to Edgbaston ahead of the Commonwealth Games in 2022.</p> <p><u>Background</u></p> <p>In 2005, a Transport and Works Act Order (TWAo) was granted to the West Midlands Passenger Transport Executive (WMPTE, also known as Centro) for the further extension of the Midland Metro tram line to serve Birmingham City Centre, Broad Street and Hagley Road. The</p>		

	<p>overall scheme terminates at 54 Hagley Road, with the scheme being developed and constructed in three sections. The city centre section between Snow Hill station and Stephenson Street was completed in 2016. The section between Stephenson Street and Centenary Square commenced in summer 2017, and is due to be completed in December 2019, and the Edgbaston Extension in late 2021. These last two sections are jointly known as the Westside Metro Extension.</p> <p>In early 2006, the City Council and Centro reviewed the need for Complementary Highway Works to alleviate the anticipated congestion impact of the Metro extension. A report to Cabinet on the 13th November 2006, (Metro, Birmingham City Centre Extension - Birmingham City Council / Centro Development) included a Heads of Terms which contained a list of suggested improvements to the road network. This list has subsequently been used as the basis for developing Complementary Highway Works (see later).</p> <p>In the 14th March 2011 report to Cabinet (Midland Metro Birmingham City Centre Extension and Associated Highway Works), the 2006 Heads of Terms were replaced with a new Memorandum of Understanding with Centro, and the Bus Mall (City Centre Interchange) works were approved for delivery prior to constructing the Metro extension to Stephenson Street. The Bus Mall works were completed, by Centro, in 2013.</p> <p>In October 2013, Cabinet approved the Metro Extension to Centenary Square and Associated Works – Project Definition Document for the extension of the tram up to Centenary Square.</p> <p>In December 2013, the WMCA (Metro works were formerly delivered by Centro) applied for fresh compulsory acquisition powers required for the construction and operation of part of the tramway authorised by the 2005 TWAO between New Street Station and Centenary Square. It also sought authority for variations to the works authorised by the 2005 TWAO at Paradise Circus Queensway and near Centenary Square, and the compulsory acquisition and use of land for the purposes of those variations, Following a public inquiry that closed in January 2014, the Secretary of State authorised these variations in May 2016.</p> <p>In early 2017, Cabinet confirmed the principle of extending the Bus Lane Enforcement provision within the city limits. The Westside Metro Extension and Associated Measures follow the same principle in supporting public transport to improve reliability and journey times.</p> <p>Many of the Complementary Highway Works listed in the 2006 Heads of Terms have been delivered, but the remaining measures have been linked to the construction of the Westside Metro Extension. Between August and November 2017 the MMA reviewed the remaining complementary highway works suggested in the 2006 Heads of Terms, and identified which would be taken forward. In response to complaints received from some residents on Sheepcote Street that the road had become a 'rat-run' for traffic that had previously used Broad Street, the MMA were asked to consider the issues affecting the residents and identify measures that could mitigate them. Furthermore, TfWM identified several public transport proposals that would provide some</p>
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	<p>priority for buses. Appendix C shows the updated list of Complementary Highway Works proposed to be delivered, including the scheme for Sheepcote Street and the bus priority measures.</p> <p>It was noted that the WMCA needed to progress the Complementary Highway Works as much possible before 3rd September 2018, so that they were significantly underway before the Metro works closures were implemented on Broad Street and Paradise Circus Queensway. To meet the necessary timescales the ADTC authorised a Section 278 Agreement (Highways Act, 1980) with the WMCA, with all works to be procured by the WMCA.</p> <p>Following consultation in July 2018, the ADTC, under Delegated Authority, approved the Complementary Highway Works commencing in August 2018 at Sheepcote Street, and the Holloway Head bus lane. The scheme at Bath Row /Islington Row Middleway/George Road was also permitted to commence early investigation and preliminary civils works.</p> <p>The traffic management closures required to construct the Metro Extension at Paradise Circus Queensway and Broad Street commenced on the 3rd September 2018 as planned. This was approved by the ADTC following consultation with the CMTE. WMCA/TfWM undertook local consultation with the businesses and Westside Business Improvement District.</p> <p>It is proposed that any remaining Complementary Highway Works listed in Appendix C will be progressed by WMCA /TfWM following approval of the details by the ADTC, in consultation with the CMTE.</p> <p>The Westside Metro Extension and Associated Measures create areas where 'bus or tram only' restrictions are required. This is for safety and/or operational efficiency of those services. The only practical way to legally enforce the restrictions is through the use of enforcement cameras, and the WMCA/MMA are making provision within the designs for camera equipment. Estimated provision has been made for the revenue implications within Table 2 of the Budget Summary in this Appendix.</p> <p><u>Consultation</u></p> <p>A consultation exercise was undertaken during March 2018 on two of the proposed Complementary Highway Works, Sheepcote Street scheme and the Bath Row /Islington Row Middleway scheme, and the bus priority measures.</p> <p>In July 2018, under Delegated Authority (in consultation with the CMTE) the ADTC approved the commencement of the Statutory consultation for the Complementary Highway Works at Bath Row/Islington Row Middleway/George Road and Sheepcote Street, respectively. A summary of the consultation exercises, and the responses received, is provided in Appendix E.</p> <p>The bus priority measures for Holloway Head/Bath Row, Harborne Road Bus Lane and Paradise Queensway/Great Charles Street Queensway/Margaret Street have been advertised under Experimental Traffic Regulation Orders, which have an overall consultation period of</p>
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	<p>18 months.</p> <p>The remaining schemes in Appendix C will be taken forward following further development and consideration of any comments received from consultation with local stakeholders.</p> <p><u>Capital Implications</u></p> <p>Delivery and funding of the Metro Westside Extension and Associated Measures capital works, including the acquisition and installation of enforcement cameras, is the responsibility of WMCA/TfWM. The total estimated capital cost is £149.200m, (including development, fees and contingency), funded by WMCA/TfWM. Details of the breakdown of this cost can be found in the Budget Summary in this Appendix.</p> <p><u>Revenue Implications</u></p> <p><u>Camera Enforcement Operational Income and Expenditure:</u></p> <p>Following the transfer of the camera enforcement equipment from the WMCA the City Council will be solely responsible for the ongoing enforcement operations and associated income and expenditure. Income will be generated from Penalty Charge Notices (PCNs) issued as part of the enforcement regime and this income will be used in the first instance to cover the operational costs including cameras and administration costs of enforcement as follows:</p> <ul style="list-style-type: none"> • on-going running costs for the cameras including maintenance servicing, energy and licences; • operational costs (processing and administration) of the PCNs; • replacement of the cameras and associated equipment in future years; • cost of decommissioning the cameras. <p>Any net surpluses generated will be used in accordance with applicable regulations, which is in line with the strategy for utilising the sums generated from bus lane enforcement as outlined in the Cabinet Report, Updated Transportation and Highways Capital Funding Strategy 2015/16 to 2020/21 Programme Definition Report approved on 16 February 2016.</p> <p>The Budget Summary, Table 2 shows the estimated income and expenditure based upon the proposed enforcement regime, which assumes the maximum 17 cameras, and experience from Bus Lane Enforcement schemes already in operation within the city.</p> <p>Once transferred to the City Council the cameras will be managed as part of the wider enforcement camera network. To ensure that the income is sufficient to fund the costs of enforcement the level of infringement/PCNs issued will be monitored closely and operational resources reviewed/adjusted accordingly.</p>
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Highways Infrastructure Maintenance:

As well as the cameras, the works will create assets that will form part of the highway upon completion of the project and as such they will be maintained within the overall highway maintenance regime. The impact to the City Council in terms of on-going maintenance costs arising from additional highway assets will be assessed during scheme development and are expected to be funded by WMCA/TfWM through a commuted sum payment. The current estimated ongoing maintenance value for the new assets created by the works is £0.740m over a 30 year period (£0.025m per year for full year of maintenance). In the event that a financial shortfall is experienced in the WMCA/TfWM budget, the City Council may be asked to assist in finding an alternative source of funding for all, or part of, the highway maintenance liabilities. This would have to come from funds identified for the provision for Highways Maintenance held within Corporate Policy Contingency.

The Budget Summary in this Appendix provides additional information and Appendix H provides an indicative cross-section which explains how asset management responsibilities are shared between the City Council and the Tram Operator (on behalf of WMCA).

Procurement*Metro and the Complementary Highway Works*

The Metro works, and some of the Complementary Highway Works, are procured through the Midland Metro Alliance (MMA). In July 2016, the MMA was formed to deliver the proposed Metro routes. It consists of the West Midlands Combined Authority (WMCA – Metro was previously delivered by WMPTE/Centro), which owns the Midland Metro; a consortium of design experts from Egis, Tony Gee and Pell Frischmann; and rail construction specialists Colas Rail – with Colas' sub-alliance partners Colas Ltd, Barhale, Bouygues UK and Auctus Management Group.

The MMA will implement a 10-year programme of tram system enhancement works and deliver a lasting legacy for the West Midlands that will enable social and economic regeneration, and deliver local jobs and training. The partnership has been formed through an OJEU-compliant procurement process. MMA compliance with BBC4SR principles is summarised in Appendix G.

As part of the Complementary Highway Works, TfWM have implemented bus resilience measures, such as the Harborne Road Bus Lane Scheme, which they have procured through their own governance and procurement exercise.

Bus/Tram Enforcement Cameras

The City Council is to take ownership of the assets and responsibility for ongoing maintenance and enforcement operations following implementation. The City Council will formally take ownership (accrue) through a Transfer Agreement once the operational enforcement team have confirmed successful implementation and they will then become part of the existing bus lane enforcement network.

The ICT requirements relating to the Bus Lane Enforcement cameras are in line with ICT services already provided for the City Council by Capita Information Technology and Digital Service (IT&DS) contract. To ensure compatibility with City Council systems, to incorporate into the current maintenance regime and as the City Council are contractually obliged to procure via IT&DS, they will lead on the procurement,

	<p>working with WMCA to agree the number and location of cameras required, (up to seventeen cameras currently proposed).</p> <p>Once requirements are defined the City Council will obtain a quotation from IT&DS and, following agreement by WMCA, will invoice WMCA for the agreed amount. The City Council will procure the equipment from IT&DS once the funds have been received and WMCA will take initial ownership for implementation, prior to the transfer of equipment to the City Council.</p> <p><u>PFI Contract Alignment</u></p> <p>Liaison will take place with the Highway Maintenance and Management PFI Contractor through the design development stage to align the works where possible with planned maintenance work.</p>		
Links to Corporate and Service Outcomes	<p>The Westside Metro Extension and Associated Measures support the City Council's Plan and Budget 2018-2022 priorities, specifically through investment in transport infrastructure and improved connectivity that supports new developments being built in Birmingham. The project is aligned with the policies set out in Birmingham Connected, West Midlands Strategic Transport Plan, the Big City Plan, and the Curzon HS2 Masterplan.</p> <p>The project aligns with the GBSLEP documents Strategy for Growth, Strategic Economic Plan and Curzon Investment Plan.</p>		
Options Appraisal approved by	Cabinet	Date of Approval	13 th November 2006
Benefits Quantification- Impact on Outcomes	Measure		Impact
	Extension of tram route to Edgbaston.		Direct light rail connection between Birmingham Snow Hill, Birmingham New Street (Grand Central) and Five Ways/Hagley Road via Centenary Square /Broad Street. Reduces reliance on private vehicles.
	Frontage to frontage public realm improvement along the route.		Better public realm will improve the area for the businesses, and for visitors to Commonwealth Games.
	Associated Measures		<p>The Complementary Highway Works are being undertaken to improve, and manage, traffic movements caused by the Metro extension, and/or to improve bus priority.</p> <p>The enforcement cameras will be used to reduce the likelihood of private vehicles having a negative impact upon public transport journey time reliability.</p>
Project Deliverables	The Westside Metro Extension will deliver approximately 2km of tram extension including five new tram stops. It also delivers several		

	Associated Measures (i.e. Complementary Highway Works and bus resilience measures/enforcement cameras) that provide better traffic management, public transport facilities and journey time reliability.		
Scope	This project includes delivery of the Metro infrastructure and associated highway improvement measures to support economic growth, and promote public transport.		
Scope exclusions	The proposals cover the works detailed in this FBC only.		
Dependencies on other projects or activities	The Associated Measures are complementary to the Westside Metro Extension and provide necessary network improvements and bus resilience measures to ensure successful implementation and public transport journey time reliability.		
Achievability	WMCA has appointed a specialist design team led by a global architectural and place design team including traffic modelling experts, engineering experts, and lighting experts to carry out the development and detailed design work on the projects. The City Council's in-house delivery team (Infrastructure Delivery) are leading the project in terms of technical approvals and reporting in their statutory function as Highway Authority.		
Project Manager	Nigel Tammo		
Budget Holder	West Midlands Combined Authority /Transport for West Midlands		
Sponsor	Philip Edwards		
Project Accountant	Andy Price		
Project Board Members	Philip Edwards, Peter Parker, Nigel Tammo, Andy Price		
Business Partner-Economy	Simon Ansell	Date of BP-Economy Approval:	16 th January 2019
Planned start date for delivery of the project	July 2017 for Centenary Square extension start	Planned date of technical completion	December 2021 for operational tram to Edgbaston

2. Budget Summary - Civils Works – Delivered and funded by WMCA/TfWM

Capital Costs & Funding	Voyager Code	Up to 2018/19	2018/19	2019/20	2020/21	Totals
		£m	£m	£m	£m	£m
Expenditure						
Development, Design and Implementation Costs for Westside Metro Extension and Associated Measures	CA-2703-08	50.89	36.93	34.95	26.13	148.9
Camera Equipment Procurement & Installation		0.11	0.07	0.05	0.07	0.30
Scheme Total (Capital)		51.00	37.00	35.00	26.20	149.20
Funding						
West Midlands Combined Authority		51.00	37.00	35.00	26.20	149.20
Funding Total (Capital)		51.00	37.00	35.00	26.20	149.20

Revenue Consequences			2018/19	2019/20	Later Years
			£'000	£'000	£'000
Estimated Highway Asset Maintenance			0.000	15.0	(Full Year) 25.0
Infrastructure works Total			0.000	15.0	25.0
Funded By:					
Commutated Sum (see below)			0.000	15.0	25.0
Totals			0.000	15.0	25.0

Notes – Revenue Consequences

Asset Management / Maintenance Implications

As part of the City Council's obligations under the Highway Maintenance and Management Private Finance Initiative (HMMPFI) contract, Highways have been formally notified of the proposed changes to the highway inventory arising from this scheme which has been allocated to SSD No. 3224 – Metro Centenary Square extension and SSD 5158 – Metro Edgbaston extension and Associated Measures.

Consultation with Amey is also being carried out to coordinate the proposed works with other programmed activities on the highway network.

Maintenance Costs – Infrastructure Works

The Westside Metro and complementary highway works will create assets that will form part of the highway upon completion of the project; as such they will need to be maintained within the overall highway maintenance regime. The estimated net cost of including these newly created assets within the highway maintenance regime is estimated at £0.740m over a 30 year period (£0.025m per year for full year of maintenance). This additional cost will be funded by a commuted sum provided by the West Midlands Combined Authority as a one-off up-front payment to the City Council. In the event that a financial shortfall is experienced in the WMCA/TfWM budget, the City Council may be asked to assist in

finding an alternative source of funding for all, or part of, the highway maintenance liabilities. This would have to come from funds identified for the provision for Highways Maintenance held within Corporate Policy Contingency.

2. Budget summary (continued) – Camera Enforcement

Westside Metro Complementary Highway Works Bus Lane Enforcement - Operational Income & Expenditure

	Estimated Values					
	2019/20	2020/21	2021/22	2022/23	2023/24	2024 - 2028
	£000's	£000's	£000's	£000's	£000's	£000's
Bus Lane Enforcement Operational Income						
Sums for 17 Cameras (note 5)	(567.54)	(420.83)	(356.52)	(321.61)	(265.58)	(785.93)
Total Operational Sums	(567.54)	(420.83)	(356.52)	(321.61)	(265.58)	(785.93)

Bus Lane Enforcement Operational Expenditure						
Operational Costs for 17 cameras (notes 1,2,3,5)	207.44	153.82	130.36	117.55	97.02	287.17
Maintenance and Servicing of Cameras (note 3)	30.90	51.50	66.95	87.55	87.55	350.20
Camera Licence up to 3 per annum @ £358 each	0.36	0.72	1.10	1.10	1.10	4.40
Energy Cost associated with Cameras	0.24	0.40	0.52	0.52	0.68	2.72
Additional Highways Asset Cost (note 3)	12.24	20.40	26.52	34.68	34.68	138.72
Total Operational Expenditure	251.18	226.84	225.45	241.40	221.03	783.21

(Surplus)/Deficit at Year End	(316.36)	(193.99)	(131.07)	(80.21)	(44.55)	(2.72)
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(Surplus)/Deficit B/fwd	0.00	(291.36)	(455.35)	(561.42)	(611.63)	(631.18)
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Contribution to camera renewals fund	25.00	25.00	25.00	25.00	25.00	100.00
Camera Decommission cost (notes 3,5)	0.00	0.00	0.00	0.00	0.00	12.50
Future Information + Traffic Survey Activities (note 4)	0.00	5.00	0.00	5.00	0.00	5.00
(Surplus)/Deficit C/fwd	(291.36)	(455.35)	(561.42)	(611.63)	(631.18)	(516.40)

The Budget Summary, Table 2 above shows the estimated income and expenditure based upon the proposed enforcement regime, which assumes the maximum 17 cameras, and experience from Bus Lane Enforcement schemes already in operation within the city.

Notes relating to Table 2 above:

- (1) Staffing levels to be reviewed post-implementation based on actual changes in workload.
- (2) Operational Cost includes assessment & processing of PCN;
- (3) Phased introduction of cameras to suit Metro construction programme (and phased decommission)
- (4) Allow for 3No. surveys and refresh campaigns - (i) after Centenary Square section opens; (ii) when Edgbaston Extension section opens, (iii) 6 years from start
- (5) Camera life assumed to be 7 years before decommissioning

3. Key Milestone dates	
Cabinet Approval	12 th February 2019
Canal & Rivers Trust – Broad St canal bridge strengthening works	March 2019 Completion
Edgbaston Extension works start	March 2019
Centenary Square extension works complete	December 2019
Edgbaston Extension works complete	December 2021

4. Checklist of Documents Supporting the FBC		
Item	Mandatory attachment	Number attached
Financial Case and Plan		
<ul style="list-style-type: none"> Detailed workings in support of the above Budget Summary (as necessary) 	Mandatory	Included in FBC
<ul style="list-style-type: none"> Statement of required resource (people, equipment, accommodation) – append a spreadsheet or other document 	Mandatory	n/a
<ul style="list-style-type: none"> Whole Lifecycle Costing analysis (as necessary) 	Mandatory	Included in FBC
<ul style="list-style-type: none"> Milestone Dates/ Project Critical Path (set up in Voyager or attached in a spreadsheet) 	Mandatory	Included in FBC – Section 3
Project Development products		
<ul style="list-style-type: none"> Risk Management Assessment 	Mandatory	Appendix F to Public Report
<ul style="list-style-type: none"> Consultation Summary 	Mandatory	Appendix E to Public Report
Other Attachments (list as appropriate)		
<ul style="list-style-type: none"> Metro Route Plan 		Appendix B to Public Report
<ul style="list-style-type: none"> Complementary Highway Works 		Appendix C to Public Report
<ul style="list-style-type: none"> Proposed camera enforcement locations 		Appendix D to Public Report
<ul style="list-style-type: none"> MMA BBC4SR compliance 		Appendix G to Public Report
<ul style="list-style-type: none"> Typical Highway Cross-Section with asset maintenance responsibilities indicated 		Appendix H to Public Report